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WAC 246-03-010 Definitions. In addition to the definitions contained in WAC 197-11-700 through 197-

246-854

Osteopathic physicians' assistants.

11-799, the following terms shall have the listed meanings:

Acting agency means an agency with jurisdiction which has received an application for a license, or which is proposing an action.

Agency guidelines shall mean chapter 246-03 WAC. Department shall mean the department of health.

Environmental report shall mean a document prepared by the applicant, when required by the department, for use in the preparation of a draft EIS.

Licensing means the agency process in granting, renewing or modifying a license.

Private applicant means any person or entity, other than an agency as defined in this section, applying for a license from an agency.

Secretary shall mean the secretary of the department of health.

SEPA committee means the departmental committee which oversees the department's SEPA activities. The committee's composition and responsibilities are outlined in WAC 246–03–140.

SEPA guidelines shall mean chapter 197-11 WAC.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-03-010, filed 12/27/90, effective 1/31/91.]

WAC 246-03-020 Adoption by reference. The department of health adopts the following sections or subsections of chapter 197-11 WAC by reference:

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197-11-350	Mitigated DNS.
197-11-360	Determination of significance (DS)/initi-
	ation of scoping.
197-11-390	Effect of threshold determination.
197-11-400	Purpose of EIS.
197-11-402	General requirements.
197-11-405	EIS types.
197–11–406	EIS timing.
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19711410	Expanded scoping. (Optional)
197-11-420	EIS preparation.
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197-11-430	Format.
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197-11-440	EIS contents.
197-11-442	Contents of EIS on nonproject proposals.
197-11-443	EIS contents when prior nonproject EIS.
197-11-444	Elements of the environment.
197-11-448	Relationship of EIS to other
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197-11-450	Cost-benefit analysis.
197-11-455	Issuance of DEIS.
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197-11-500	Purpose of this part.
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197-11-508	SEPA register.
197–11–510	Public notice.
197–11–535	Public hearings and meetings.
197–11–545	Effect of no comment.
197–11–550	Specificity of comments.
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197–11–570	Consulted agency costs to assist lead
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197-11-610	Use of NEPA documents.
197-11-620	Supplemental environmental impact
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197-11-630	Adoption—Procedures.
197-11-635	Incorporation by reference—Procedures.
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197-11-793	Scoping.
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197–11–796	State agency.
197–11–797	Threshold determination.
197–11–799	Underlying governmental action.
197–11–800	Categorical exemptions.
197–11–810	Exemptions and nonexemptions applicable
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197–11–820	Department of licensing.
197–11–845	Department of social and health services.
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197–11–906	Content and consistency of agency
197-11-908	procedures. Environmentally sensitive areas.
197–11–908	Designation of responsible official.
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197–11–917	Relationship to chapter 197–10 WAC.
197–11–918	Lack of agency procedures.
197-11-920	Agencies with environmental expertise.
197-11-922	Lead agency rules.
197-11-924	Determining the lead agency.
197-11-926	Lead agency for governmental proposals.
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197-11-932	Lead agency for private projects requiring
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	one of the agencies is a county/city.
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	licenses from a local agency not a

licenses from a local agency, not a

county/city, and one or more state

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197-11-936 Lead agency for private projects requiring
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             Lead agencies for specific proposals.
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             Transfer of lead agency status to a state
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197-11-942
             Agreements on lead agency status.
197-11-944
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             Assumption of lead agency status.
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             notice (DS).
197-11-985
             Notice of assumption of lead agency
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197-11-990
             Notice of action.
[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), §
246-03-020, filed 12/27/90, effective 1/31/91.]
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WAC 246-03-030 Timing and procedures for specified major actions. (1) Regulations and licenses relating to radioactive material.

- (a) Scope of major action.
- (i) Regulations relating to radioactive material shall include the adoption or amendment by the department of any regulations incorporating general standards for issuance of licenses authorizing the possession, use and transfer of radioactive material pursuant to RCW 70-.98.080, and 70.121.030.
- (ii) The issuance, revocation or suspension of individual licenses under RCW 70.98.080 shall be exempt. However, the following licenses shall not be exempt: Licenses to operate low level waste burial facilities or licenses to operate or expand beyond design capacity mineral processing facilities, or their tailings areas, whose products, or byproducts, have concentrations of naturally occurring radioactive materials in excess of exempt concentrations as specified in WAC 246–232–010.
- (b) Timing of SEPA requirements for regulations for radioactive material.
- (i) A final EIS or determination of nonsignificance, whichever is determined appropriate by the lead agency's responsible official, shall be completed for proposed regulations relating to radioactive material prior to the hearing preceding final adoption of such regulations.
- (ii) The responsible official shall mail to the department of ecology headquarters office in Olympia for listing in the "SEPA register" (see WAC 197-11-508) a copy of any determination of nonsignificance, a copy of the draft EIS, and a copy of the final EIS. Copies of the draft EIS shall also be mailed to those agencies identified in WAC 197-11-455, and of the final EIS to those agencies identified in WAC 197-11-460. The responsible official shall also give public notice in the form and manner specified in RCW 43.21C.080 of the determination of nonsignificance or final EIS.

agencies.

- (c) Timing of SEPA requirements for licenses for uranium or thorium mills or radioactive waste burial facilities.
- (i) The applicant shall be responsible for completing an environmental checklist, furnishing additional information needed by the department to make the threshold determination, and preparing an environmental report regarding the environmental impact of proposed activities for independent evaluation by the department, prior to issuance of a draft EIS by the responsible official. The environmental report shall be submitted within ninety days following determination of significance. The following material presents a more detailed description of the responsibilities of the private applicant as well as of the responsible official.
- (ii) The applicant shall be responsible for contacting the responsible official during the early stages of the applicants planning activities to obtain an outline of SEPA requirements.
- (iii) Thereafter the private applicant shall be responsible for preparation of an environmental checklist. The responsible official shall review each environmental checklist and, within fifteen days of the responsible official's receipt of the checklist, shall prepare and issue either a determination of nonsignificance as per WAC 197-11-340 or a determination of significance as per WAC 197-11-360.
- (iv) When the responsible official has issued a determination of nonsignificance, the official shall send the determination and environmental checklist to the applicant and to all agencies with jurisdiction for review and comment as per WAC 197-11-340.
- (v) When the responsible official makes a determination of significance, the preparation of an environmental report shall be completed in a manner consistent with the requirements for a draft EIS and shall be the responsibility of the private applicant. If the applicant desires, he may contract with an outside consultant for the preparation of the environmental report. The department may also contract with an outside consultant for the preparation of a draft or final EIS. The department or the department's contracted consultant will independently evaluate the environmental report and be responsible for the reliability of any information used in the draft or final EIS. Unless the scope or complexity of the proposal indicates otherwise, the final EIS shall be issued as described in WAC 197–11–460(6).
- (vi) The responsible official shall request review of the draft EIS from the agencies listed in WAC 197-11-455 and from such other agencies as he determines.
- (vii) The responsible official shall mail a copy of the draft EIS to the department of ecology headquarters in Olympia for listing in the "SEPA register" (see WAC 197-11-508) and also to those agencies listed in WAC 197-11-455.
- (viii) When the responsible official determines that substantial changes are needed or that new information has become available, the preparation of an amended or new environmental report is the responsibility of the private applicant.

- (ix) The responsible official shall mail a copy of the final EIS to the department of ecology headquarters office in Olympia for listing in the "SEPA register" (see WAC 197-11-508). The responsible official shall also mail copies of the final EIS to those agencies specified in WAC 197-11-460 and shall give public notice of the completion of the final EIS in the form and manner specified in RCW 43.21C.080.
- (2) Water system plans for public water systems as per WAC 246-290-100 and RCW 70.116.050.
- (a) Scope of major action. Water system plans are plans developed and submitted to the department for review and approval pursuant to WAC 246-290-100 and RCW 70.116.050.
- (b) Timing and procedures for water system plans prepared by private applicants.
- (i) In general, when a private applicant has prepared a water system plan for review and approval by the department, the private applicant shall be responsible for completing an environmental checklist, furnishing additional information needed by the department to make the threshold determination, and preparing the draft and final EIS under the direction of the responsible official. The following material presents a more detailed description of the responsibilities of the private applicant as well as the responsible official.
- (ii) Follow steps outlined in subsection (1)(c)(ii) through (iv) of this section.
- (iii) When the responsible official makes a determination of significance, the preparation of a draft and final EIS shall be in compliance with WAC 197-11-400 through 197-11-620 and shall be the responsibility of the private applicant. If the applicant desires, he may contract with an outside consultant for preparation of the draft or final EIS. Unless the scope or complexity of the proposal indicates otherwise, the final EIS shall be completed within sixty days of the end of the comment period for the draft EIS.
 - (iv) See subsection (1)(c)(vi) and (vii) of this section.
- (v) When the responsible official determines that substantial changes are needed or that new information has become available, the preparation of an amended or a new draft EIS is the responsibility of the private applicant.
 - (vi) See subsection (1)(c)(ix) of this section.
- (vii) Every water system plan submitted by a private applicant to the department for review and approval shall be accompanied by either a determination of non-significance or a final EIS.
- (c) Timing and procedure for water system plans prepared by agencies. Every water system plan submitted by an agency to the department for review and approval shall be accompanied by either a determination of nonsignificance or a final EIS.
- (3) New public water supply systems and major extensions of existing public water supply systems.
- (a) Scope of major action. The approval of engineering reports or plans and specifications pursuant to chapter 246-290 WAC for all surface water source development, all water system storage facilities greater than one-half million gallons, new transmission lines

longer than one thousand feet and larger than eight inches in diameter located in new rights of way and major extensions to existing water distribution systems involving use of pipes greater than eight inches in diameter, which are designed to increase the existing service area by more than one square mile.

- (b) Timing and procedures for projects proposed by private applicants.
- (i) In general, when a private applicant seeks the approval of the department for a new public water supply or a major extension to an existing public water supply, the private applicant shall be responsible for completing an environmental checklist, furnishing additional information needed by the department to make the threshold determination, and preparing the draft and final EIS under the direction of the responsible official. The following material presents a more detailed description of the responsibilities of the private applicant as well as of the responsible official.
- (ii) Follow steps outlined in subsection (1)(c)(ii) through (iv) of this section.
 - (iii) See subsection (2)(b)(iii) of this section.
 - (iv) See subsection (1)(c)(vi) and (vii) of this section.
 - (v) See subsection (2)(b)(v) of this section.
 - (vi) See subsection (1)(c)(ix) of this section.
- (vii) Whenever preliminary engineering reports, or plans and specifications for a new public water supply system or a major extension to an existing public water supply system are submitted by a private applicant to the secretary for review and approval pursuant to chapter 246–290 WAC, these reports, plans and specifications shall be accompanied by a determination of nonsignificance or a final EIS.
- (c) Timing and procedures for projects proposed by an agency. Whenever preliminary engineering reports, plans and specifications for a new public water supply system or a major extension to an existing public water supply system are submitted by an agency to the secretary for review and approval pursuant to chapter 246–290 WAC, these reports, plans and specifications shall be accompanied by a determination of nonsignificance or a final

(4) Certificates of need.

- (a) Scope of major action. Certificate of need applications are subject to SEPA requirements whenever the applicant proposes to construct a new hospital or to construct major additions to the existing service capacity of such an institution: *Provided*, That such applications are not subject to SEPA requirements when the proposed construction consists of additions which provide less than twelve thousand square feet of floor area and with associated parking facilities designed for forty automobiles or less: *Provided further*, That certificate of need applications for "substantial acquisitions" are not subject to SEPA requirements.
- (b) Timing and procedures for hospital certificates of need. Where a state or local agency other than the department is lead agency for hospital construction, the department shall not issue a certificate of need approving this hospital construction until the applicant has supplied it with a determination of nonsignificance or a

final EIS, and until seven days after the issuance by the lead agency of any final EIS. Nothing in this subsection shall preclude the department from making a commitment to issue a certificate of need to an applicant subject to the timely receipt of an appropriate environmental impact statement or determination of nonsignificance.

- (5) Approval of sewerage general plans and/or water general plans described in RCW 36.94.010.
- (a) Scope of major action. Sewerage general plans and water general plans shall mean and include those described in RCW 36.94.010.
- (b) Timing and procedures for water general plans. Every water general plan submitted by a county to the department for review and approval shall be accompanied by either a determination of nonsignificance or a final EIS.
- (6) Plans and specifications for new sewage treatment works or for major extensions to existing sewage treatment works pursuant to WAC 246-271-020.

Scope of major action. Plans and specifications for new sewage treatment works or for major extensions to existing sewage treatment works are those which are reviewed and approved by the department pursuant to WAC 246-271-050.

- (7) Construction of any building, facility or other installation for the purpose of housing department personnel or for prisons or for fulfilling other statutorily directed or authorized functions.
- (a) Scope of major action. The construction of buildings, facilities or other installations for the purpose of housing department personnel or for other authorized functions shall be subject to SEPA requirements, but such construction shall not be subject to SEPA requirements when it consists of additions which provide less than twelve thousand square feet of floor area and with associated parking facilities designed for forty automobiles or less.
 - (b) Timing and procedures.
- (i) The responsible official shall, prior to the request for construction bids, prepare an environmental checklist for each construction project of the type described in (a) of this subsection.
- (ii) Within fifteen days of the request for construction bids, the responsible official shall make (A) a written declaration of nonsignificance where the responsible official determines that the proposed construction will not have a significant adverse environmental impact or (B) a written declaration of significance where the responsible official determines that the proposed construction will have a significant adverse environmental impact.
- (iii) Where the responsible official has made a determination of significance, the preparation of the draft and final EIS shall be in compliance with WAC 197–11–400 through 197–11–620, and shall be the responsibility of the responsible official. Unless the scope or complexity of the proposal indicates otherwise, the final EIS shall be completed within sixty days of the end of the comment period for the draft EIS.
 - (iv) See subsection (1)(c)(vi) of this section.

- (v) The responsible official shall mail to the department of ecology headquarters office in Olympia for listing in the "SEPA register" a copy of any determination of nonsignificance, a copy of the draft EIS, and a copy of the final EIS. Copies of the draft EIS shall also be mailed to those agencies identified in WAC 197-11-455, and of the final EIS to those agencies identified in WAC 197-11-460. The responsible official shall also give public notice in the form and manner specified in RCW 43.21C.080 of the determination of nonsignificance or final EIS.
- (8) Approval of final plans for construction of a private psychiatric hospital pursuant to WAC 246-322-020, or construction of an alcoholism treatment center pursuant to WAC 246-326-020.
- (a) Scope of major action. The approval of final plans for construction of a private psychiatric hospital pursuant to WAC 246–322–020, or construction of an alcoholism treatment center pursuant to WAC 246–326–020 shall be subject to SEPA requirements: *Provided*, That such construction shall not be subject to SEPA requirements when it consists of additions which provide less than twelve thousand square feet of floor area and with associated parking facilities designed for forty automobiles or less.
- (b) Timing and procedures for construction of the type described. Where a state or local agency other than the department is lead agency for construction of the type described in (a) of this subsection, the department shall not approve final plans for construction of a private psychiatric hospital or alcoholism treatment center until the applicant for such approval has supplied the department with a final declaration of nonsignificance or a final EIS for the construction in question, and until seven days after the issuance by the lead agency of any final EIS.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-03-030, filed 12/27/90, effective 1/31/91.]

WAC 246-03-040 Exemptions for emergency actions. If the secretary makes a written declaration that actions must be undertaken immediately or within a time too short to allow full compliance with SEPA requirements; and that such actions are necessary to avoid an imminent threat to public health or safety, or to prevent an imminent danger to public or private property, or to prevent an imminent threat of serious environmental degradation; then such actions may be undertaken without complying with SEPA requirements: *Provided*, That the department is the lead agency for such actions.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-03-040, filed 12/27/90, effective 1/31/91.]

WAC 246-03-050 Determination of lead agency and responsible official. (1) The department shall be the lead agency for the following actions:

(a) Adoption or amendment of regulations relating to radioactive source materials; proposals to construct, operate, or expand any uranium or thorium mill, or any tailings areas generated by uranium or thorium milling, or any low level radioactive waste burial facilities. The

- responsible official would be the section head, radiation control section, division of environmental health. Lead agency determination for other mineral processing proposals should be made in accordance with WAC 197–11–924 through 197–11–948;
- (b) Approval of comprehensive plans for public water supply systems when such plans are developed by private applicants and unless indicated otherwise by WAC 197–11–932, 197–11–934 and 197–11–936, and approval of new public water supply systems or major extensions of existing public water supply systems when such systems are being proposed by a private applicant unless indicated otherwise by WAC 197–11–932, 197–11–934, and 197–11–936. The responsible official would be the section head, water supply and waste section, division of environmental health;
- (c) Construction of any building, facility, or other installation for the purpose of housing department personnel or for fulfilling other statutorily directed or authorized functions. The responsible official would be a capital programs representative from the management services division, comptroller's office;
- (2) Determination of the lead agency for department major actions not listed above shall be made in accordance with the procedures and requirements of WAC 246-03-140 (4)(c) and 197-11-922 through 197-11-948.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-03-050, filed 12/27/90, effective 1/31/91.]

WAC 246-03-060 Recommended timing for threshold determination. In most cases the time required to complete a threshold determination should not exceed fifteen days. (WAC 197-11-310.)

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-03-060, filed 12/27/90, effective 1/31/91.]

WAC 246-03-070 Threshold determination process. In making a threshold determination, the responsible official shall follow the process outlined in WAC 197-11-330 through 197-11-390.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-03-070, filed 12/27/90, effective 1/31/91.]

- WAC 246-03-080 Adjudicative proceeding. Any person has the right to an adjudicative proceeding to contest the department's final threshold determination that an EIS is or is not necessary and/or the sufficiency of the final EIS. The proceeding is governed by the Administrative Procedure Act (chapter 34.05 RCW), the rules in this chapter, and by chapter 246-08 WAC. If any provision in this chapter conflicts with chapter 246-08 WAC, the provision in this chapter governs.
- (1) A person contesting a department's decision shall within twenty-eight days of the department's official notice of issuance of a final threshold determination or final EIS:
- (a) File a written application for an adjudicative proceeding by a method showing proof of receipt by the department of health; and
 - (b) Include in or with the application:

- (i) A specific statement of the issue or issues and law involved; and
- (ii) The grounds for contesting the department decision.
- (2) The initial order should be made within sixty days of the department's receipt of the application. When a party files a petition for administrative review, the review order should be made within sixty days of the department's receipt of the petition. The time to enter an order is extended by as many days as the proceeding is continued on motion by any party.
- (3)(a) If the adjudicative order is that an EIS should be filed, the presiding officer or reviewing officer shall remand the matter to the department of health to file an EIS.
- (b) If the adjudicative order is that the final EIS is not sufficient, the presiding officer or reviewing officer shall remand the matter to the department of health to correct the insufficiency.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-03-080, filed 12/27/90, effective 1/31/91.]

WAC 246-03-090 Scoping. When the department receives a scoping notice from a lead agency, the department shall submit any comments to the lead agency within twenty-one days from the date of issuance of the determination of significance. When the department is lead agency the steps in WAC 197-11-408 and 197-11-410 shall be followed.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-03-090, filed 12/27/90, effective 1/31/91.]

WAC 246-03-100 Issuance of draft EIS. When the department is lead agency, it shall issue the draft EIS in accordance with WAC 197-11-455.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-03-100, filed 12/27/90, effective 1/31/91.]

- WAC 246-03-110 Policies and procedures for conditioning or denying permits or other approvals. (1) The policies and goals in this section are supplementary to existing authorities of the department.
- (2) It is the policy of the department to avoid or mitigate adverse environmental impacts which may result from the department's decisions.
- (3) The department shall use all practical means, consistent with other essential considerations of state policy, to improve and coordinate plans, functions, programs, and resources to the end that the state and its citizens may:
- (a) Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- (b) Assure for all people of Washington safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- (c) Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
- (d) Preserve important historic, cultural, and natural aspects of our national heritage;

- (e) Maintain, wherever possible, an environment which supports diversity and variety of individual choice;
- (f) Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
- (g) Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.
- (4) The department recognizes that each person has a fundamental and inalienable right to a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.
- (5) The department shall ensure that presently unquantified environmental amenities and values will be given appropriate consideration in decision—making along with economic and technical considerations.
- (6)(a) When the environmental document for a proposal shows it will cause significant adverse impacts, the responsible official shall consider whether:
- (i) The environmental document identified mitigation measures that are reasonable and capable of being accomplished;
- (ii) Other local, state, or federal requirements and enforcement would mitigate the significant adverse environmental impacts; and
- (iii) Reasonable mitigation measures are sufficient to mitigate the significant adverse impacts.
 - (b) The responsible official may:
- (i) Condition the approval for a proposal if mitigation measures are reasonable and capable of being accomplished and the proposal is inconsistent with the policies in this section; or
- (ii) Deny the permit or approval for a proposal if reasonable mitigation measures are insufficient to mitigate significant adverse environmental impacts and the proposal is inconsistent with the policies in this section.
- (c) The procedures in WAC 197-11-660 shall also be followed when conditioning or denying permits or other approvals.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-03-110, filed 12/27/90, effective 1/31/91.]

WAC 246-03-120 Public hearings. A public hearing on the environmental impact of a proposal shall be held as specified in WAC 197-11-535.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-03-120, filed 12/27/90, effective 1/31/91.]

WAC 246-03-130 Responsibilities of the department as a consulted agency. Other lead agencies may request the department for consultation during the SEPA process. The department shall then provide consultation in accordance with the requirements of WAC 197-11-502, 197-11-545 and 197-11-570.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-03-130, filed 12/27/90, effective 1/31/91.]

WAC 246-03-140 SEPA committee. (1) There is hereby created a SEPA committee to oversee the department's SEPA activities.

- (2) The SEPA committee shall be composed of:
- (a) One representative from the water supply and waste section, division of environmental health;
- (b) One representative from the facility licensing and certification section;
- (c) One capital programs representative from management services division, comptroller's office; and
- (d) One representative from the radiation control section, division of environmental health.
- (3) A representative from the office of the attorney general will provide legal support to the committee.
 - (4) The SEPA committee shall:
- (a) Oversee the department's SEPA activities to ensure compliance with these agency guidelines, the state SEPA guidelines, and the policies and goals set forth in the State Environmental Policy Act;
- (b) Oversee the future revision of these agency guidelines so as to reflect:
- (i) Future amendment of SEPA or the state SEPA guidelines;
 - (ii) The creation of new department programs.
- (c) Designate the responsible official for any major action for which the department is lead agency when such designation has not occurred elsewhere in these agency guidelines.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-03-140, filed 12/27/90, effective 1/31/91.]

WAC 246-03-150 SEPA public information. (1) When the department is lead agency, the responsible official shall retain SEPA documents required by this chapter and shall make them available to the public in accordance with chapter 42.17 RCW.

- (2) When the department is lead agency, the responsible official shall transmit copies of the following documents to the department of ecology headquarters office in Olympia:
- (a) All draft and final EISs. (See WAC 197-11-455 and 197-11-460.)
- (b) All determinations of nonsignificance (see WAC 197-11-340).

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), \$246-03-150, filed 12/27/90, effective 1/31/91.]

WAC 246-03-160 Severability. If any provision of this chapter or its application to any person or circumstances is held invalid, the remainder of this chapter, or the application of the provision to other persons or circumstances, shall not be affected.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-03-160, filed 12/27/90, effective 1/31/91.]

Chapter 246-05 WAC LOCAL PUBLIC HEALTH--GUIDELINES

WAC

246-05-020 Appendix—County, city, or town in a public health district, department, or county-city department.

WAC 246-05-020 Appendix--County, city, or town in a public health district, department, or county-city department.

APPENDIX

Guidelines¹

for Negotiating Support by a

County, City, or Town in

Maintaining and Operating the Local Public Health
Agency

(District, Department, or County-City Department)

- A. Every county, city, and town should furnish the support necessary to provide the following basic public health services^{2,3}:
 - 1. Personal health protection services

Epidemiologic services
Tuberculosis
Sexually transmitted diseases
Other communicable diseases
Immunizations
Family planning
Child health services
Crippled children's services
Maternal and infant services
Nutrition and/or WIC services
Chronic disease prevention, detection, hazard control

2. Environmental health protection services

Food Water Solid waste disposal Liquid waste disposal Living environment Chemical and physical hazards Vector control

- 3. Laboratory services necessary to support any of the programs listed in A 1 and 2 of this appendix (provide or purchase)
- 4. Vital records, birth, and death registration
- 5. Health promotion, information, and education
- B. In addition, counties, cities, and towns at their option may choose to support additional public health protection and promotion actions or services. These may include, but not be limited to:

Dental health
School health services
Jail health services
Mental health services
Alcoholism services
Developmental disabilities
Health screening programs for the aging
(Senior Citizens Services Act)
Home health services
Primary care for special population groups
Emergency health services

[Title 246 WAC-p 9]

Community health planning

Any program area identified by local or state health officials when the health of the general population is shown to be at risk of adverse

health effects.

C. Potential sources of funds:

- 1. Fees for permits and licenses
- 2. Charges for services
- 3. Contracts with counties, cities, schools, and other agencies
- 4. State and federal funds
- 5. Sales of property
- 6. Miscellaneous gifts and sales, e.g., sale of publications
- County funds for special services not needed or desired by all participating counties and cities
- 8. City funds for special services
- 9. Reserve funds for special purposes
- 10. County general fund base support
- D. Determination of equitable share for each municipality (county or city) of its fiscal support of basic health services:
- 1. The level of the basic health services budget and the respective county and city general fund contributions necessary to balance that budget should be determined through a negotiation process. The negotiators may wish to use some form of formula in this determination. Negotiating the formula is a basic part of the negotiation process. A number of formulas may be considered. Most formulas involve one or more of the following factors: Population (per capita), assessed valuation, use, need, or proportion of budget. No single formula is mandated state-wide, but a formula, once adopted by a local health board, should apply to all member jurisdictions. Agreements need not be limited to a single year. Multiyear contracts may be negotiated with the agreement adopting a basic formula but providing for annual adjustments of variable factors such as valuation or population.
- 2. The following formulas are presented as guidelines. Options 1 through 3 provide for a county base support while options 4 and 5 have no county base built into the formula. The county base is a variable replacing previous statutory millages for public health and tuberculosis. The base may vary. In multicounty health districts, the county base public health support is to be determined annually by the district health board in consultation with the respective boards of county commissioners and divided among the member counties in proportion to each county's assessed valuation. An acceptable alternative method is to vary the base among the county members of the health district as the board of health, in consultation with the respective boards of county commissioners, shall determine.

Option 1:

$$C = 1/2 B$$
 $\frac{A_c}{A_c}$ $+ 1/2 B \frac{P_c}{P_c}$

Where:

- C = Contribution of city or county needed to balance the budget (basic plus optional dollars)
- B = Dollars needed to balance the basic plus optional dollar portion of the local public health agency annual budget
- A_c = The assessed valuation of the component governmental unit, i.e., the city, town, or unincorporated area of the county
- A_t = The total assessed valuation of the governmental jurisdictions encompassed by the local public health agency
- P_c = Population of the component governmental unit, i.e., the city, town, or unincorporated area of the county
- P_t = Total population of the governmental jurisdictions encompassed by the health district

Variation 1:

Derive the proportion of assessed valuation and population in the formula from the average of several years instead of the current year only.

Option 2:

$$C = B - \frac{A_c}{A_c}$$

Where:

- C = Contribution of city or county needed to balance the budget (basic plus optional dollars)
- B = Dollars needed to balance the basic plus optional portion of the local public health agency annual budget
- A_c = The assessed valuation of the component governmental unit, i.e., the city, town, or unincorporated area of the county
- A_t = The total assessed valuation of the governmental jurisdictions encompassed by the local public health agency

Option 3:

$$C = B - \frac{P_c}{P_c}$$

Where:

- C = Contribution of city or county needed to balance the budget (basic plus optional dollars)
- B = Dollars needed to balance the basic plus optional portion of the local public health agency annual budget
- P_c = Population of the component governmental unit, i.e., the city, town, or unincorporated area of the county
- P_t = Total population of the governmental jurisdictions encompassed by the local public health agency

Variation 1:

The per capita share is graduated by grouping or classes of cities so that small cities pay less than large cities.

Variation 2:

The county base remains the same but the per capita share is applied only to the cities.

Option 4:

- (1) Charge each city or county the full estimated cost of environmental health services
- (2) Charge each county the full cost of tuberculosis services
- (3) Charge each city and county the remainder of tax necessary on a per capita basis
- (4) Reduce each city's charge by giving credit to them for the county property taxes paid by the property owners of each city
- (5) Small cities may be charged a reduced share per capita

Option 5:

Half of the necessary funds are divided among the cities and counties in proportion to a statistical report of the services provided to each. The other half are provided on the basis of population or another of the options identified.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–05–020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.46.080 and 43.20.050. 83–19–057 (Order 268), § 248–990–990, filed 9/20/83; 83–04–011 (Order 253), § 248–990–990, filed 1/24/83; Order 104, Appendix—Guidelines (codified as WAC 248–990–990), filed 9/25/74; Appendix, filed 8/4/67.]

Chapter 246-08 WAC PRACTICE AND PROCEDURE

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ADJUDICATIVE PROCEEDINGS

WAC 246-08-001 Application of chapter 248-08 WAC. (1) Scope. This chapter applies to adjudicative proceedings, begun on or after July 1, 1989, in programs administered by the department of health except those professional licensing programs for which the secretary is not the disciplinary authority as defined under RCW 18.130.040 (2)(b). The definition of the word "begun" is the department's receipt of the application for an adjudicative proceeding. Proceedings begun before July 1, 1989, are governed by the procedural rules in effect on June 30, 1989. Legal authority for adopting this chapter is RCW 34.05.220 (1)(a).

(2) Conflict in rules. If a provision in this chapter conflicts with a provision in the chapter containing the

¹Pertains also to a county, city, or town which has withdrawn from a health district to operate its own health department or decides to contract with another municipality for such health services.

²Basic services are those services required by state law and regulations or provided under service contracts with the department of social and health services.

³A list of all applicable laws, administrative regulations, and available current service contracts will be provided by the state board of health upon request.

program's substantive rules, the provision in the chapter containing the program's substantive rules governs.

(3) Physical and mailing addresses. The presiding officer is generally an administrative law judge from the office of administrative hearings. Presiding officer administrative and field office addresses are listed under WAC 10-04-020. The reviewing officer is generally the secretary or the secretary's designee. The secretary's address for professions governed by the Uniform Disciplinary Act is the legal support section of the investigation, legal and audit unit, which is located at 1300 Quince, Olympia, and the mailing address is Legal Support Section, P.O. Box 2245, Olympia, WA 98507-2245. The reviewing officer's address for other programs is the office of appeals which is located in Office Building Number 2, Twelfth and Franklin, Olympia, and the mailing address is Office of Appeals, P.O. Box 2465, Olympia, WA 98504-2465.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90-06-018 (Order 038), § 248-08-410, filed 2/28/90, effective 3/1/90; Regulation 08.410, effective 3/11/60.]

- WAC 246-08-020 Application for an adjudicative proceeding. (1) Uniform Disciplinary Act application. A person contesting a decision or statement of charges under the Uniform Disciplinary Act shall file a written application for an adjudicative proceeding with the legal support section of the investigation, legal and audit unit. The application must be filed within twenty days of the person's receipt of the decision or statement of charges.
- (2) Other program application. A person contesting a department decision in a program not governed by the Uniform Disciplinary Act shall file a written application for an adjudicative proceeding by a method showing proof of receipt with the office of appeals within twenty-eight days of receipt of the decision.
- (3) Application contents. The application must include or have attached:
- (a) A specific statement of the issue or issues and law involved;
- (b) The grounds for contesting the department decision or statement of charges; and
- (c) A copy of the contested department decision or statement of charges.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90-06-018 (Order 038), § 248-08-413, filed 2/28/90, effective 3/1/90.]

WAC 246-08-030 Administrative law judge--Authority--Application of law--Assignment--Disqualification. (1) Authority. The administrative law judge shall:

- (a) Hear and decide the issue anew (de novo);
- (b) Determine the order of presentation of evidence;
- (c) Administer oaths and affirmations;
- (d) Issue subpoenas;
- (e) Rule on procedural matters, objections, and motions;

- (f) Rule on offers of proof and receive relevant evidence;
- (g) Interrogate witnesses called by the parties in an impartial manner to develop any facts deemed necessary to fairly and adequately decide the matter;
- (h) Call additional witnesses and request additional exhibits deemed necessary to complete the record and receive such evidence subject to full opportunity for cross-examination and rebuttal by all parties;
- (i) Take any appropriate action necessary to maintain order during the hearing;
- (j) Permit or require oral argument or briefs and determine the time limits for submission thereof;
- (k) Permit photographic and recording equipment at hearings subject to conditions imposed by the administrative law judge to preserve confidentiality or to prevent disruption;
- (1) Permit a person to waive any right conferred upon that person by chapter 34.05 RCW and/or chapter 248–08 WAC, except to the extent precluded by another provision of law; and
- (m) Take any other action necessary and authorized by any applicable rule.
- (2) Application of law. The administrative law judge shall:
- (a) Apply as the first source of law governing an issue the rules of the department as adopted in the Washington Administrative Code (WAC);
- (b) If there is no department rule governing the issue, resolve the issue on the basis of the best legal authority and reasoning available, including that found in federal and Washington Constitutions, statutes and regulations, and court decisions;
 - (c) Not declare any department rule invalid;
- (d) If the validity of any department rule is raised as an issue at any proceeding, permit arguments to be made on the record concerning that issue for subsequent review purposes; and
- (e) If the sole issue is one of federal or state law requiring adjustments for classes of people the department serves or regulates, dismiss the application without permitting argument to be made on the record regarding the validity of the law.
- (3) Assignment of administrative law judge. If the notice of hearing does not state the name of the presiding administrative law judge, the chief administrative law judge of the office of administrative hearings shall:
- (a) Make such assignment five days or more before the hearing; and
- (b) Disclose the assignment to any party or representative making inquiry.
 - (4) Motion of prejudice.
- (a) A motion of prejudice with a supporting affidavit under RCW 34.12.050 shall be filed at least three days before the hearing or any earlier stage of the adjudicative proceeding when the administrative law judge may be required to issue a discretionary ruling.
- (b) The chief administrative law judge or designee shall rule upon subsequent motions of prejudice filed by the same party in the same proceeding.

(5) Petition for disqualification. An individual petitioning to disqualify an administrative law judge under RCW 34.05.425 shall file such petition with the administrative law judge assigned to preside over the proceeding.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90-06-018 (Order 038), § 248-08-425, filed 2/28/90, effective 3/1/90.]

WAC 246-08-040 Representation. (1) Appellant representation.

- (a) The appellant may represent himself or herself, or the appellant may be represented by a lawyer or paralegal or by a relative, friend, or other person.
- (b) The appellant may not be represented in an adjudicative proceeding by an employee of the department.
- (c) Nothing in this regulation shall be construed as prohibiting an employee of the department from:
- (i) Acting as a witness on behalf of an appellant; or
- (ii) Referring an appellant to legal resources in the community; or
- (iii) Assisting the appellant in obtaining nonconfidential information available to the appellant; or
- (iv) Advising the appellant of possible arguments made against the contested decision.
- (2) Department representation. The department may be represented by a department employee or by the office of the attorney general.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90-06-018 (Order 038), § 248-08-428, filed 2/28/90, effective 3/1/90.]

- WAC 246-08-050 Prehearing conference. (1) Request, purpose, order, and objection. Upon the administrative law judge's own motion or upon request of a party, the administrative law judge may direct the parties or the parties' representatives to engage in a prehearing conference.
- (a) The purpose of a prehearing conference is to consider:
 - (i) Simplification of issues;
- (ii) The necessity or desirability of amendments to the pleadings;
- (iii) The possibility of obtaining stipulations, admissions of fact, and admissions of the authenticity of documents to avoid unnecessary proof;
- (iv) Limitations on the number and consolidation of the examination of witnesses;
 - (v) Procedural matters;
- (vi) Distribution of written testimony and exhibits to the parties before the hearing; and
- (vii) Such other matters as may aid in the disposition or settlement of the proceeding.
- (b) The administrative law judge may conduct a prehearing conferences by telephone conference call, in person, or other manner.
- (c) Following the prehearing conference, the administrative law judge shall issue an order reciting the:
 - (i) Action taken at the conference;
 - (ii) Amendments allowed to the pleadings; and

- (iii) Agreements the parties made concerning all of the matters considered.
- (d) If no objection to such order is filed with the administrative law judge within ten days after the date such order is served, the order shall control the subsequent course of the proceeding unless modified for good cause by subsequent order.
- (2) Conference on day of hearing. Nothing in this rule shall limit the administrative law judge during any proceeding from conducting a conference before the taking of testimony or recessing the hearing and conducting a conference. The administrative law judge shall state on the record the results of such conference.
- (3) Not a limit to informal settlement. Nothing in this rule shall limit the right of any agency to informally settle a matter to make an adjudicative proceeding unnecessary.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–08–050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90–06–018 (Order 038), § 248–08–431, filed 2/28/90, effective 3/1/90.]

WAC 246-08-060 Notice of hearing. (1) Served by. The department or the office of administrative hearings shall serve a notice of hearing on the parties and representatives.

- (2) Contents.
- (a) If the hearing is conducted by teleconference call, the notice shall so state.
 - (b) The notice shall state:
- (i) If a limited English-speaking or hearing impaired party or witness needs an interpreter, a qualified interpreter shall be appointed; and
- (ii) There shall be no cost to the party or witness for the interpreter.
 - (c) The notice shall include a form for a party to:
 - (i) Indicate the need for an interpreter; and
- (ii) Identify the primary language or hearing impaired status of the person.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–08–060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90–06–018 (Order 038), § 248–08–434, filed 2/28/90, effective 3/1/90.]

WAC 246-08-070 Filing and service of papers. (1) Service required when filing. A party filing a pleading, brief, or other paper, except an application for an adjudicative proceeding, with the support section of the investigation, legal and audit unit, or with the office of appeals, or the administrative law judge shall serve a copy of the paper upon:

- (a) Every other party; or
- (b) If the other party is represented or has an agent, the other party's representative or agent.
- (2) Filing and service made by. Unless otherwise provided by law, filing and service shall be made by:
 - (a) Personal service;
 - (b) First class, registered, or certified mail;
 - (c) Telegraph;
- (d) Electronic telefacsimile transmission and sameday mailing of copies; or
 - (e) Commercial parcel delivery company.

- (3) Filing complete. Filing with the support section of the investigation, legal and audit unit or with the office of appeals shall be complete upon actual receipt during office hours at the appropriate office. Filing with the administrative law judge shall be complete upon actual receipt during office hours at the office of the administrative law judge.
 - (4) Service complete. Service shall be complete when:
 - (a) Personal service is made;
- (b) Mail is properly stamped, addressed, and deposited in the United States mail;
- (c) A properly addressed telegram is deposited with a telegraph company with charges prepaid;
- (d) An electronic telefacsimile transmission produces proof of transmission; or
- (e) A commercial parcel is delivered to the parcel delivery company with charges prepaid.
- (5) Proof of service. Where proof of service is required by statute or rule, filing the papers with the department or the administrative law judge, together with one of the following, shall constitute proof of service:
 - (a) An acknowledgement of service;
- (b) A certificate of service including the date the papers were served upon all parties and the signature of the serving party indicating service was completed by:
 - (i) Personal service;
- (ii) Mailing a copy properly addressed with postage prepaid to each party to the proceeding, or the party's representative or authorized agent;
- (iii) Telegraphing a copy properly addressed with charges prepaid to each party to the proceeding, or the party's representative or authorized agent; or
- (iv) Transmitting a copy by electronic telefacsimile device and, on the same day, mailing a copy to each party to the proceeding, or the party's representative or authorized agent; or
- (v) Depositing a copy properly addressed with charges prepaid with a commercial parcel delivery company.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90-06-018 (Order 038), § 248-08-437, filed 2/28/90, effective 3/1/90.]

- WAC 246-08-080 Vacating an order of dismissal for reason of default or withdrawal. (1) Right to request. A party against whom a dismissal for reason of default or withdrawal is entered shall have the right to file a written petition requesting that the order be vacated.
- (2) Contents. The request shall state the grounds relied upon.
- (3) Filed at. The request shall be filed at the legal support section of the investigation, legal and audit unit for Uniform Disciplinary Act proceedings or the office of appeals for other programs within twenty—one days from the date the dismissal order was served.
- (4) Grounds to vacate an order of dismissal. If, in the reasoned opinion of the administrative law judge, good cause to grant the relief is shown, the administrative law judge shall vacate the order of dismissal and reinstate the application.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90-06-018 (Order 038), § 248-08-440, filed 2/28/90, effective 3/1/90; Regulation 08.440, effective 3/11/60.]

WAC 246-08-090 Subpoenas. (1) Statutory requirements. The administrative law judge, the department, and attorneys for parties may issue a subpoena. A subpoena shall be issued and enforced and witness fees paid, as provided under RCW 34.05.446.

- (2) Contents. Every subpoena shall:
- (a) Identify the party causing issuance of the subpoena;
- (b) State the name of the agency as the department of health;
 - (c) State the title of the proceeding; and
- (d) Command the person to whom the subpoena is directed to attend and give testimony or produce designated books, documents, or things under the person's control at the time and place set for the hearing.
- (3) Service. A subpoena may be served by any suitable person eighteen years of age or older by:
- (a) Exhibiting and reading the subpoena to the witness;
 - (b) Giving the witness a copy; or
- (c) Leaving a copy at the place of the witness' residence.
- (4) Proof of service. When a subpoena is served by other than an officer authorized to serve process, proof of service shall be made by affidavit.
- (5) Quashing, modifying, conditioning. The administrative law judge, upon request made promptly and in any event at or before the time specified for compliance in the subpoena, may:
- (a) Quash or modify the subpoena if the subpoena is unreasonable and oppressive; or
- (b) Condition denial of the request upon the advancement by the person in whose behalf the subpoena is issued of the reasonable cost of producing the books, papers, documents, or tangible things.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90-06-018 (Order 038), § 248-08-446, filed 2/28/90, effective 3/1/90.]

- WAC 246-08-100 Teleconference hearing. (1) When authorized. The administrative law judge may conduct all or part of the hearing by telephone, television, or other electronic means if each participant in the hearing has an opportunity to participate in, to hear, and, if technically and economically feasible, to see the entire proceeding while it is taking place.
- (2) Documentary evidence. When the hearing is conducted by electronic means, documentary evidence shall be submitted in advance as provided under WAC 248-08-452(2).

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90-06-018 (Order 038), § 248-08-449, filed 2/28/90, effective 3/1/90.]

- WAC 246-08-110 Rules of evidence. (1) Objections. The administrative law judge shall rule upon objections to the admissibility of evidence pursuant to RCW 34.05.452.
- (2) Submission in advance. The administrative law judge may order:
- (a) A party to submit documentary evidence to the administrative law judge and to the other parties sufficiently in advance of the hearing to permit study and preparation of cross—examination and rebuttal evidence;
- (b) Documentary evidence not submitted in advance as required in subsection (2)(a) of this section, shall not be received in evidence in the absence of a clear showing the offering party had good cause for failure to produce the evidence sooner, unless the evidence is submitted for impeachment purposes; and
- (c) The authenticity of all documents submitted in advance in a proceeding, when such submission is required, to be deemed admitted unless written objection is filed before the hearing. However, a party shall be permitted to challenge such authenticity at a later time upon a clear showing of good cause for failure to file such written objection.
- (3) Portions of a document. When portions only of a document are relied upon, the offering party shall identify the pertinent excerpts and state the purpose the materials are offered. Only the excerpts, in the form of copies, shall be received in the record. However, the whole of the original documents, except any portions containing confidential material protected by law, shall be made available for examination and for use by all parties.
- (4) Expert witness limitation. No former employee of the department shall, except with the permission of the department, appear as an expert witness on behalf of other parties in a proceeding where the expert witness previously took an active part in the investigation as a department representative.
- (5) Witness refusal to answer. The refusal of a witness to answer any question ruled proper shall, in the discretion of the administrative law judge, be grounds for striking all testimony previously given by such witness on the related matter.
- (6) Stipulation, admission. A party bound by a stipulation or an admission of record may, at any time during the proceeding, withdraw it in whole or in part by showing to the satisfaction of the administrative law judge that:
- (a) Such stipulation or admission was made inadvertently or under a bona fide mistake of fact contrary to the true fact; and
- (b) The party's withdrawal, at the time proposed, will not unjustly prejudice the rights of other parties to the proceeding.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90-06-018 (Order 038), § 248-08-452, filed 2/28/90, effective 3/1/90.]

WAC 246-08-120 Contents of orders. Every order shall correctly caption both the name of the agency and

the proceeding and shall designate the parties and representatives participating in the proceeding.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-120, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90-06-018 (Order 038), § 248-08-461, filed 2/28/90, effective 3/1/90.]

WAC 246-08-130 Petition for review—Response to petition—Disqualification of review judge. (1) Initial orders that may become final orders.

- (a) If a petition for review is not filed within twenty—one days from service of the initial order, the initial order shall, subject to the provisions of this section, become the final order.
- (b) An initial order shall not become the final order in proceeding governed by the Uniform Disciplinary Act. Each party shall have the right to file a petition for review of the administrative law judge's order. Whether a petition for review is or is not filed, the secretary or designee shall enter the final order.
- (2) Who may petition. Each party has the right to file a petition for review of an order entered by an administrative law judge.
 - (3) Petition contents. The petition for review shall:
- (a) Specify the portions of the order to which exception is taken; and
- (b) Refer to the evidence of record relied upon to support the petition.
 - (4) Petition time limits.
- (a) The period to timely file a petition for review is twenty-one days from the date the initial decision was served.
- (b) The secretary or designee shall extend the twentyone day period to file a petition for review upon request of a party when:
- (i) The request is made during the twenty-one day period; and
 - (ii) Good cause for the extension is shown.
- (c) The secretary or designee shall waive the twenty—one day limit for filing a petition for review when:
- (i) A petition for review is filed within thirty days of the date the initial order becomes final; and
- (ii) The petitioner demonstrates good cause for failure to file a timely petition. Good cause includes:
- (A) A mistake, inadvertence, or excusable neglect on the part of the petitioner; or
- (B) An unavoidable casualty or misfortune preventing the petitioner from timely filing a petition for review.
- (5) Petition filing and service. The petition for review shall be in writing and filed with the secretary or designee. The petitioner shall serve copies of the petition upon the other parties or their representative at the time the petition is filed. A petition in a proceeding governed by the Uniform Disciplinary Act shall be filed on the secretary or designee at the legal support section of the investigation, legal and audit unit. A petition in other programs shall be filed on the secretary or designee at the office of appeals.
- (6) Notice of petition. When a petition for review is filed, the secretary or designee shall send a copy of the petition to the nonpetitioning party or, if represented, to

the representative with a notice of the right to file a response.

- (7) Response time limit, filing, service.
- (a) The nonpetitioning party shall file any response with the secretary or designee within seven days of the date that office served a copy of the petition on the nonpetitioning party or representative.
- (b) The nonpetitioning party shall serve a copy of the response upon the petitioner and any other party or, if represented, on the representative at the time the response is filed.
- (c) A secretary or designee may extend the period to file a response upon request of a party showing good cause.
- (8) Disqualification. The secretary or designee shall disclose the assignment of the reviewing officer to any party or representative making inquiry. An individual petitioning to disqualify a reviewing officer under RCW 34.05.425 shall file such petition with the reviewing officer assigned to the proceeding.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-130, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90-06-018 (Order 038), § 248-08-464, filed 2/28/90, effective 3/1/90.]

WAC 246-08-140 Reconsideration. Within ten days of service of a review order, any party may file a petition for reconsideration. The petition shall state the specific grounds upon which relief is requested. A petition for reconsideration shall be filed at the legal support section of the investigation, legal and audit unit for proceedings governed by the Uniform Disciplinary Act. A petition for reconsideration in other programs shall be filed at the office of appeals.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–08–140, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90–06–018 (Order 038), § 248–08–470, filed 2/28/90, effective 3/1/90; Regulation 08.470, effective 3/11/60.]

WAC 246-08-150 Adjudicative proceedings-Notice to limited-English-speaking parties. When the department is notified or otherwise made aware that a limited-English-speaking person is a party in an adjudicative proceeding, all notices concerning the hearing, including notices of hearing, continuance, and dismissal, shall either be in the primary language of the party or shall include a notice in the primary language of the party which describes the significance of the notice and how the party may receive assistance in understanding and responding to, if necessary, the notice.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-150, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90-06-018 (Order 038), § 248-08-515, filed 2/28/90, effective 3/1/90.]

WAC 246-08-160 Interpreters. (1) A "hearing impaired person" means a person who, because of a hearing impairment or speech defects, cannot readily understand or communicate in spoken language. A "hearing impaired person" includes a person who is deaf, deaf and blind, or hard of hearing.

- (2) An "impaired person" means a person involved in an adjudicative proceeding and is a:
 - (a) Hearing impaired person; or
 - (b) Limited-English-speaking person.
- (3) An "intermediary interpreter" means a hearing impaired interpreter:
- (a) The registry of interpreters for the deaf certified with a reverse skills certificate;
- (b) Meeting the requirements under subsection (9) of this section; and
 - (c) Able to assist by:
- (i) Providing an accurate interpretation between spoken and sign language or between variants of sign language; and
- (ii) Acting as an intermediary between a hearing impaired person and a qualified interpreter for the hearing impaired.
- (4) A "limited-English-speaking person" means a person who because of a non-English-speaking cultural background cannot readily speak or understand the English language.
 - (5) A "qualified interpreter" means a person:
- (a) Readily able to interpret spoken English and translate written English to and for an impaired person; and
- (b) Readily able to interpret or translate statements of an impaired person into spoken English; and
- (c) Meeting the requirements of subsection (9) of this section provided, for hearing impaired persons, a qualified interpreter shall be certified by the registry of interpreters for the deaf with a:
 - (i) Specialist certificate-legal;
 - (ii) Master's comprehensive skills certificate; or
 - (iii) Comprehensive skills certificate.
- (6) When an impaired person is a party to any adjudicative proceeding or witness therein, the administrative law judge shall, in the absence of a written waiver signed by the impaired person, appoint a qualified interpreter to assist the impaired person throughout the proceedings. The right to a qualified interpreter may not be waived except when:
- (a) The impaired person requests a waiver through the use of a qualified interpreter;
- (b) The impaired person's representative, if any, consents; and
- (c) The administrative law judge determines the waiver is knowingly, voluntarily, and intelligently complete.
- (7) Waiver of a qualified interpreter shall not preclude the impaired person from claiming the right to a qualified interpreter at a later time during the proceeding.
- (8) In a proceeding, neither the participant's relatives nor the involved agency employees shall be appointed as interpreters. Subsection (8) of this section shall not prohibit the office of administrative hearings from hiring an employee whose sole function is to interpret in an adjudicative proceeding.
- (9) The administrative law judge shall make a preliminary determination that an interpreter is able in the

particular proceeding to accurately interpret communication to and from the impaired person. The administrative law judge's determination shall be based on the:

- (a) Testimony or stated needs of the impaired person;
- (b) Interpreter's education, certifications, and experience in interpreting for contested cases and/or adjudicative proceedings;
- (c) Interpreter's understanding of the basic vocabulary and procedure involved in the proceeding; and
 - (d) Interpreter's impartiality.

The parties or the parties' representative may question the interpreter as to the interpreter's qualifications and impartiality.

- (10) The administrative law judge shall appoint another qualified interpreter if during the proceeding, in the opinion of the impaired person, the administrative law judge, or a qualified observer, the interpreter does not provide accurate and effective communication with the impaired person.
- (11) If the communication mode or language of a hearing impaired person is not readily interpretable, the interpreter or hearing impaired person shall notify the administrative law judge who shall appoint and pay an intermediary interpreter to assist the qualified interpreter.
- (12) An interpreter shall, before beginning to interpret, take an oath that:
- (a) A true interpretation will be made to the examined person of all the proceedings in a language or in a manner the person understands; and
- (b) The interpreter will repeat the statements of the person being examined to the administrative law judge, in the English language, to the best of the interpreter's skill and judgment.
 - (13) Mode of interpretation. Interpreters for:
- (a) Limited-English-speaking persons shall use a simultaneous mode of interpretation where the administrative law judge and interpreter agree simultaneous interpretation advances fairness and efficiency; otherwise, the interpreter shall use the consecutive mode of foreign language interpretation; and
- (b) Hearing impaired persons shall use the simultaneous mode of interpretation unless an intermediary interpreter is needed. If an intermediary interpreter is needed, interpreters shall use the mode the qualified interpreter considers to provide the most accurate and effective communication with the hearing impaired person.
- (c) When an impaired person is a party to a proceeding, the:
- (i) Interpreter shall translate all statements made by other hearing participants;
- (ii) Administrative law judge shall ensure sufficient, extra time is provided to permit translation; and
- (iii) Administrative law judge shall ensure the interpreter translates the entire proceeding to the party to the extent the party has the same opportunity to understand the statements made during the proceedings as a nonimpaired party has when listening to uninterpreted statements.

- (14) An examiner shall not examine a qualified interpreter, without the written consent of the parties to the communication, as to the:
- (a) Communication the interpreter interprets under circumstances where the communication is privileged by law; and
- (b) Information the interpreter obtains while interpreting a pending proceeding.
- (15) The administrative law judge shall explain to the impaired party:
- (a) A written decision or order is issued in English; and
- (b) The party may contact the interpreter for a translation of the decision at no cost to the party; and
- (c) If the party has a right to review the order, the party is orally informed during the hearing of the right and of the time limits to request a review.
- (16) At the hearing, the interpreter for a limited—English—speaking party shall provide to the administrative law judge the interpreter's telephone number written in the primary language of the impaired party. The interpreter's telephone number shall be attached to the order mailed to the impaired party. A copy of the order shall also be mailed to the interpreter for use in translation.
- (17) In any proceeding involving a hearing impaired person, the administrative law judge may, with the consent of the agency involved in the hearing, order the testimony of the hearing impaired person and the interpretation of the proceeding by the qualified interpreter be visually recorded for use as the official transcript of the proceeding. Where simultaneous translation is used for interpreting statements of limited—English—speaking persons, the foreign language statements shall be recorded simultaneously with the English language statements by means of a separate tape recorder.
- (18) A qualified interpreter appointed under this section shall be entitled to a reasonable fee for services, including waiting time and reimbursement for actual necessary travel expenses. The agency involved in the hearing shall pay the interpreter fee and expenses. The interpreter services fee for a hearing impaired person shall be under the standards established by the department of social and health services, office of deaf services.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–08–160, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90–06–018 (Order 038), § 248–08–525, filed 2/28/90, effective 3/1/90.]

WAC 246-08-170 Group hearing. (1) When applicable. When two or more appellants file applications contesting a similar issue, the applications may be consolidated by the department or the administrative law judge and heard as a group. The administrative law judge may consolidate on the administrative law judge's own motion or on a party's request.

- (2) Withdrawal from group.
- (a) An appellant scheduled for a group hearing may request to withdraw from the group hearing in favor of

an individual hearing. An appellant's request to withdraw from a group hearing shall be granted if the motion is filed before the:

- (i) Administrative law judge has made a discretionary ruling; and
 - (ii) Date of the hearing.
- (b) The administrative law judge may grant a motion to withdraw filed at any time when good cause is shown.
- (3) Right to representation. Each appellant in a group hearing shall retain the right to representation of the appellant's choice.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-170, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90-06-018 (Order 038), § 248-08-535, filed 2/28/90, effective 3/1/90.]

WAC 246-08-180 Continuance. (1) Authority to grant. The administrative law judge may:

- (a) Order postponements, continuances, extensions of time, and adjournments on the administrative law judge's own motion; or
- (b) Grant postponements, continuances, extensions of time, and adjournments upon the request of any party, with notice to all other parties, showing good and sufficient cause.
- (2) When, how requested. A request for a continuance made before the hearing date may be either oral or in writing. The party seeking the continuance shall:
- (a) Notify the other parties before presenting the request to the administrative law judge; and
- (b) Inform the administrative law judge whether the other parties agreed to the continuance. If the other parties did not agree to the continuance, the administrative law judge shall promptly schedule a prehearing conference to receive evidence and/or argument and to rule on the request.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-180, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90-06-018 (Order 038), § 248-08-545, filed 2/28/90, effective 3/1/90.]

- WAC 246-08-190 Computation of time. (1) When computing a period of time prescribed or allowed by an applicable statute or rule, the day of the act, event, or default after which the designated period of time begins to run shall not be included.
- (2) The last day of the computed period shall be included unless the last day is a Saturday, Sunday, or a legal holiday.
- (3) When the last day is a Saturday, Sunday, or a legal holiday, the period shall run until the end of the next day which is neither a Saturday, Sunday, nor a holiday.
- (4) When the period of time prescribed or allowed is seven days or less, the intermediate Saturday and Sunday, and any legal holiday, shall be excluded in the computation.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-190, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90-06-018 (Order 038), § 248-08-565, filed 2/28/90, effective 3/1/90.]

- WAC 246-08-200 Judicial review of final adjudicative order. (1) Right to judicial review; exclusive remedy. An appellant or intervener aggrieved, as described under RCW 34.05.530, by the final decision or order in a department of health adjudicative proceeding may appeal the decision or order to court. Judicial review shall only be obtained under chapter 34.05 RCW. Judicial review may not be obtained through any other procedure. Chapter 34.05 RCW contains the pertinent provisions of law.
- (2) Instituting judicial review; filing and serving the petition. As described under RCW 34.05.542(2), within thirty days after the secretary or designee mails the final decision, the petitioner shall file the petition for judicial review with the court and serve a copy of the petition on the department of health, the office of the attorney general, and all parties of record.
- (a) A petition shall be filed in the superior court, at the petitioner's option, for:
 - (i) Thurston County;
- (ii) The county of the petitioner's residence or principal place of business; or
- (iii) Any county where property affected by the decision is located.
- (b) Service of a copy of the petition for judicial review on the department of health may be had by personally serving a copy of the petition on the office of appeals.
- (c) Service of a copy of the petition for judicial review on the office of the attorney general may be had by mailing a copy of the petition, postage prepaid, to the Office of the Attorney General, Highway-Licenses Building, PB-55, Olympia, WA 98504.
- (d) Service of a copy of the petition for judicial review on other parties of record may be had by mailing the copy of the petition to the other parties, properly addressed and postage prepaid.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–08–200, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90–06–018 (Order 038), § 248–08–575, filed 2/28/90, effective 3/1/90.]

- WAC 246-08-210 Variances, waivers, and exemptions. The following procedure for considering requests for exemptions, waivers, or variances applies to all those rules and regulations of the Washington state board of health wherein the board of health has reserved the power to grant exemptions, waivers, and variances:
- (1) The secretary of the department of health or a designee shall recommend, pursuant to the standards contained in the regulation from which the exemption, waiver, or variance is requested, that the request be granted or denied.
- (2) Written summaries of all exemptions, waivers, or variances proposed to be granted by the secretary of the department of health or a designee shall be sent to all members of the board of health and may include written forms upon which the members may indicate approval or disapproval of the request.
- (3) Upon receipt by the secretary of the department of health or a designee of written approval by eight

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members of the board of health, and provided no member disapproves, the approval shall take effect and the secretary of the department of health or a designee shall notify the requesting party of the approval in writing.

(4) If any member of the board of health shall disapprove the request within thirty days of notification by the secretary of the department of health or a designee, the request shall be discussed by the board at its next regular meeting.

(5) If a request is recommended for denial by the secretary of the department of health or a designee, the request and recommendation shall be reviewed by the board at its next regular meeting.

Consideration by the board of requests for exemptions, waivers, and variances shall not be considered adjudicative proceedings as that term is defined in chapter 34.05 RCW. Statements and written material regarding the request may be presented to the board at or before its meeting wherein the application will be considered. Allowing cross—examination of witnesses in such matters shall be within the discretion of the board.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–08–210, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 34.05 RCW. 90–01–134 (Order 016), § 248–08–596, filed 12/20/89, effective 1/20/90. Statutory Authority: RCW 43.20.050. 85–15–063 (Order 289), § 248–08–596, filed 7/18/85; 84–16–031 (Order 272), § 248–08–596, filed 7/25/84. Formerly WAC 248–08–595.]

ADMINISTRATIVE PROCEDURES

WAC 246-08-320 Delegation of authority by secretary. Under RCW 43.70.040, certain powers and duties may be delegated by the secretary. Writings evidencing delegations of authority are on file in the secretary's office and may be inspected between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–08–320, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90–06–018 (Order 038), § 248–320–340, filed 2/28/90, effective 3/1/90.]

WAC 246-08-330 Declaratory orders—Forms, content, and filing. A petition for a declaratory order shall generally adhere to the following form:

(1) At the top of the page shall appear the wording "Before the state department of health." On the left side of page below the foregoing the following caption shall be set out: "In the matter of the petition of (name of petitioning party) for a declaratory order." Opposite the foregoing caption shall appear the word "petition."

(2) The body of the petition shall be set out in numbered paragraphs. The first paragraph shall state the name and address of the petitioning party. The second paragraph shall state all rules or statutes that may be brought into issue by the petition. Succeeding paragraphs shall set out the state of facts relied upon in form similar to that applicable to complaints in civil actions before the superior courts of this state. The concluding paragraphs shall contain the prayer of the petitioner. The petition shall be subscribed and verified in the

manner prescribed for verification of complaints in the superior courts of this state.

(3) The original and two legible copies shall be filed with the Department of Health, 1300 Quince Street, Mailstop: EY-12, Olympia, WA 98504. Petitions shall be on white paper, 8 1/2" x 11" in size.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-330, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90-06-018 (Order 038), § 248-320-350, filed 2/28/90, effective 3/1/90.]

WAC 246-08-340 Declaratory orders—Procedural rights of persons in relation to petition. If a petition for a declaratory order is set for specified proceedings under RCW 34.05.240 (5)(b), the department shall give not less than seven days advance written notice of the proceedings to the petitioner and all persons described under RCW 34.05.240(3). The notice shall contain the time, date, place, and nature of the proceedings and shall describe how interested persons may participate in the proceeding.

[Statutory Authority: RCW 43.70,040. 91–02–049 (Order 121), recodified as § 246–08–340, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90–06–018 (Order 038), § 248–320–360, filed 2/28/90, effective 3/1/90.]

WAC 246-08-350 Declaratory orders—Disposition of petition. A declaratory order entered by the department or a decision declining to enter a declaratory order shall be in writing and shall be served upon the petitioner and all other persons described under RCW 34.05.240(3).

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–08–350, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90–06–018 (Order 038), § 248–320–370, filed 2/28/90, effective 3/1/90.]

WAC 246-08-360 Petition for rule making—Form, content, and filing. A petition for adoption, amendment, or repeal of a rule shall generally adhere to the following form:

- (1) At the top of the page shall appear the wording "Before the state department of health." On the left side of the page below the foregoing the following caption shall be set out: "In the matter of the petition of (name of petitioning party) for rule making." Opposite the foregoing caption shall appear the word "petition."
- (2) The body of the petition shall be set out in numbered paragraphs. The first paragraph shall state the name and address of the petitioning party and whether petitioner seeks the adoption of new rule or rules, or amendment or repeal of existing rule or rules. The second paragraph, in case of a proposed new rule or amendment of an existing rule, shall set forth the desired rule in its entirety. Where the petition is for repeal of an existing rule, such shall be stated and the rule proposed to be repealed shall either be set forth in full or shall be referred to by agency rule number. The third paragraph shall set forth concisely the reasons for the proposal of the petitioner and shall contain a statement as to the interest of the petitioner in the subject matter of the rule. Additional numbered paragraphs may be used to give

full explanation of petitioner's reason for the action sought.

(3) Petitions shall be dated and signed by the person or entity named in the first paragraph or by his attorney. The original and two legible copies of the petition shall be filed with the Department of Health, 1300 Quince Street, Mailstop: EY-12, Olympia, WA 98504. Petitions shall be on white paper 8 1/2" x 11" in size.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–08–360, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90–06–018 (Order 038), § 248–320–400, filed 2/28/90, effective 3/1/90.]

WAC 246-08-370 Petition for rule making—Consideration and disposition. (1) Each petition for the adoption, amendment, or repeal of a rule shall be considered by the department and the department may, in its discretion, solicit comments or invite discussion concerning the matter before disposition of the petition.

(2) If the department denies the petition, the denial shall be served upon the petitioner.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-370, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90-06-018 (Order 038), § 248-320-410, filed 2/28/90, effective 3/1/90.]

WAC 246-08-380 Updating mailing lists. (1) Periodically, the department may cause the following notice, or a notice substantially similar, to be mailed: "In order to maintain as current a mailing list as possible, and to eliminate mailing notices to those who no longer have need for such notices, the department will discontinue use of its old mailing lists, effective (date to be specified). If you wish to continue receiving copies of notices of intention to adopt, amend or repeal rules after that date, please fill out the attached form and return it to the department at the address indicated on the form. If you do not return the form indicating your desire to continue to receive notices to adopt, amend or repeal rules, your name or the names of your organization will be removed from the mailing lists."

- (2) The notice regarding updating of mailing lists is to be mailed by first-class mail.
- (3) The form to be filled out by those persons or organizations wishing to continue to receive department notices to adopt, amend, or repeal rules shall specify interest areas covered by these notices, thereby enabling those on mailing lists to limit correspondence received.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-380, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.05.220. 90-06-018 (Order 038), § 248-320-500, filed 2/28/90, effective 3/1/90.]

POLICIES

WAC 246-08-520 Nondiscrimination. No person in the state of Washington shall, on the grounds of sex, race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity administered or supervised by the Washington state department of health as required by the federal government as a

prerequisite for fiscal grants-in-aid (Sec. 601, Civil Rights Act of 1964; 78 Stat. 252; 42 U.S.C. 2000d) and chapter 49.60 RCW.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-520, filed 12/27/90, effective 1/31/91; Order 18, § 248-10-010, filed 2/11/69.]

WAC 246-08-560 Refund of fees. (1) The department of health shall refund fees it collects that are paid in excess of the stated fee, or paid erroneously.

- (2) The payee must provide the department with a cancelled check or a cash receipt as proof of payment when requesting a refund.
- (3) The department shall make refunds of five dollars or less only upon written request within 13 months from date of payment.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-08-560, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 43.01.072. 90-08-003 (Order 044), § 246-09-060, filed 3/22/90, effective 4/22/90.]

Chapter 246–100 WAC COMMUNICABLE AND CERTAIN OTHER DISEASES

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WAC 246-100-006 Purpose. The following rules and regulations are adopted under the authority of chapter 43.20 RCW to protect the health and well-being of the public by controlling communicable and certain other diseases.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–006, filed 12/27/90, effective 1/31/91; 87–11–047 (Order 302), § 248–100–006, filed 5/19/87.]

- WAC 246-100-011 Definitions. The following definitions shall apply in the interpretation and enforcement of chapter 248-100 WAC:
- (1) "Acquired immunodeficiency syndrome (AIDS)" means an illness characterized by the diseases and conditions defined and described by the Centers for Disease Control, U.S. Public Health Services, Morbidity and Mortality Weekly Report (MMWR), August 14, 1987, Volume 36, Number 1S.
- (2) "AIDS counseling" means counseling directed toward:
- (a) Increasing the individual's understanding of acquired immunodeficiency syndrome; and
- (b) Assessing the individual's risk of HIV acquisition and transmission; and
- (c) Affecting the individual's behavior in ways to reduce the risk of acquiring and transmitting HIV infection.
- (3) "Board" means the Washington state board of health.
- (4) "Carrier" means a person harboring a specific infectious agent and serving as a potential source of infection to others, but who may or may not have signs and/or symptoms of the disease.
- (5) "Case" means a person, alive or dead, having been diagnosed to have a particular disease or condition by a health care provider with diagnosis based on clinical or laboratory criteria or both.
- (6) "Category A disease or condition" means a reportable disease or condition of urgent public health importance, a case or suspected case of which must be reported to the local or state health officer immediately at the time of diagnosis or suspected diagnosis.
- (7) "Category B disease or condition" means a reportable disease or condition of public health importance, a case of which must be reported to the local health officer no later than the next working day following date of diagnosis.
- (8) "Category C disease or condition" means a reportable disease or condition of public health importance, a case of which must be reported to the local health officer within seven days of diagnosis.

- (9) "Child day care facility" means an agency regularly providing care for a group of children for less than twenty-four hours a day and subject to licensing under chapter 74.15 RCW.
- (10) "Communicable disease" means an illness caused by an infectious agent which can be transmitted from one person, animal, or object to another person by direct or indirect means including transmission via an intermediate host or vector, food, water, or air.
- (11) "Contact" means a person exposed to an infected person, animal, or contaminated environment which might provide an opportunity to acquire the infection.
- (12) "Department" means the Washington state department of social and health services.
- (13) "Detention" or "detainment" means physical restriction of activities of an individual by confinement, consistent with WAC 248-100-206(8), for the purpose of monitoring and eliminating behaviors presenting imminent danger to public health and may include physical plant, facilities, equipment, and/or personnel to physically restrict activities of the individual to accomplish such purposes.
- (14) "Food handler" means any person preparing, processing, handling, or serving food or beverages for people other than members of his or her household.
- (15) "Food service establishment" means any establishment where food or beverages are prepared for sale or service on the premises or elsewhere, and any other establishment or operation where food is served or provided for the public with or without charge.
 - (16) "Health care facility" means:
- (a) Any facility or institution licensed under chapter 18.20 RCW, boarding home, chapter 18.46 RCW, maternity homes, chapter 18.51 RCW, nursing homes, chapter 70.41 RCW, hospitals, or chapter 71.12 RCW, private establishments, clinics, or other settings where one or more health care providers practice; and
- (b) In reference to a sexually transmitted disease, other settings as defined in chapter 70.24 RCW.
- (17) "Health care provider" means any person having direct or supervisory responsibility for the delivery of health care or medical care who is:
- (a) Licensed or certified in this state under Title 18 RCW; or
- (b) Is military personnel providing health care within the state regardless of licensure.
- (18) "HIV testing" means conducting a laboratory test or sequence of tests to detect the human immunode-ficiency virus (HIV) or antibodies to HIV performed in accordance with requirements to WAC 248-100-207.
- (19) "Infection control measures" means the management of infected persons, persons suspected to be infected, and others in such a manner as to prevent transmission of the infectious agent.
- (20) "Isolation" means the separation or restriction of activities of infected persons, or of persons suspected to be infected, from other persons to prevent transmission of the infectious agent.
- (21) "Laboratory director" means the director or manager, by whatever title known, having the administrative responsibility in any medical laboratory.

- (22) "Local health department" means the city, town, county, or district agency providing public health services to persons within the area, as provided in chapter 70.05 RCW and chapter 70.08 RCW.
- (23) "Local health officer" means the individual having been appointed under chapter 70.05 RCW as the health officer for the local health department, or having been appointed under chapter 70.08 RCW as the director of public health of a combined city-county health department.
- (24) "Medical laboratory" means any facility analyzing specimens of original material from the human body for purposes of patient care.
- (25) "Nosocomial infection" means an infection acquired in a hospital or other health care facility.
- (26) "Outbreak" means the occurrence of cases of a disease or condition in any area over a given period of time in excess of the expected number of cases.
- (27) "Post-test counseling" means counseling after the HIV test when results are provided and directed toward:
- (a) Increasing the individual's understanding of human immunodeficiency virus (HIV) infection;
- (b) Affecting the individual's behavior in ways to reduce the risk of acquiring and transmitting HIV infection;
- (c) Encouraging the individual testing positive to notify persons with whom there has been contact capable of spreading HIV;
- (d) Assessing emotional impact of HIV test results;
- (e) Appropriate referral for other community support services.
- (28) "Pretest counseling" means counseling provided prior to HIV testing and aimed at:
 - (a) Helping an individual to understand:
- (i) Ways to reduce the risk of human immunodeficiency virus (HIV) transmission;
- (ii) The nature, purpose, and potential ramifications of HIV testing;
- (iii) The significance of the results of HIV testing; and
 - (iv) The dangers of HIV infection; and
- (b) Assessing the individual's ability to cope with the results of HIV testing.
- (29) "Principal health care provider" means the attending physician or other health care provider recognized as primarily responsible for diagnosis and treatment of a patient or, in the absence of such, the health care provider initiating diagnostic testing or therapy for a patient.
- (30) "Quarantine" means the separation or restriction on activities of a person having been exposed to or infected with an infectious agent, to prevent disease transmission.
- (31) "Reportable disease or condition" means a disease or condition of public health importance, a case of which, and for certain diseases, a suspected case of which, must be brought to the attention of the local health officer.

- (32) "School" means a facility for programs of education as defined in RCW 28A.31.102 (preschool and kindergarten through grade twelve).
- (33) "Sexually transmitted disease (STD)" means a bacterial, viral, fungal, or parasitic disease or condition which is usually transmitted through sexual contact, including:
 - (a) Acute pelvic inflammatory disease;
 - (b) Chancroid;
 - (c) Chlamydia trachomitis infection;
 - (d) Genital and neonatal herpes simplex;
 - (e) Genital human papilloma virus infection;
 - (f) Gonorrhea;
 - (g) Granuloma inguinale;
 - (h) Hepatitis B infection;
- (i) Human immunodeficiency virus infection (HIV) and acquired immunodeficiency syndrome (AIDS);
 - (j) Lymphogranuloma venereum;
 - (k) Nongonococcal urethritis (NGU); and
 - (1) Syphilis.
- (34) "State health officer" means the person designated by the secretary of the department to serve as statewide health officer, or, in the absence of such designation, the person having primary responsibility for public health matters in the state.
- (35) "Suspected case" means a person whose diagnosis is thought likely to be a particular disease or condition with suspected diagnosis based on signs and symptoms, laboratory evidence, or both.
- (36) "Unusual communicable disease" means a communicable disease which is not commonly seen in the state of Washington but which is of general public health concern including, but not limited to, Lassa fever, smallpox, typhus, and yellow fever.
- (37) "Veterinarian" means an individual licensed under provisions of chapter 18.92 RCW, veterinary medicine, surgery, and dentistry and practicing animal health care.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–011, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.24 RCW. 89–07–095 (Order 325), § 248–100–011, filed 3/22/89; 88–17–057 (Order 317), § 248–100–011, filed 8/17/88. Statutory Authority: RCW 43.20.050. 88–07–063 (Order 308), § 248–100–011, filed 3/16/88; 87–11–047 (Order 302), § 248–100–011, filed 5/19/87.]

- WAC 246-100-016 Confidentiality. Identifying information about any individual with a reportable disease or condition pursuant to chapter 248-100 WAC shall be protected by persons with knowledge of such identity.
- (1) Health care providers, employees of a health care facility or medical laboratory, and other individuals with knowledge of a person with sexually transmitted disease, following the basic principles of health care providers, which respect the human dignity and confidentiality of patients:
- (a) May disclose identity of a person or release identifying information only as specified in RCW 70.24.105; and
- (b) Shall establish and implement policies and procedures to maintain confidentiality related to a patient's medical information.

- (2) For the purpose of RCW 70.24.105(6), customary methods for exchange of medical information shall be limited as follows:
- (a) Health care providers may exchange confidential medical information related to HIV testing, HIV test results, and confirmed HIV or confirmed STD diagnosis and treatment in order to provide health care services to the patient. Meaning:
- (i) The information shared impacts the care or treatment decisions concerning the patient; and
- (ii) The health care provider requires the information for the patient's benefit.
- (b) "Health care services to the patient" means personal interaction, treatment, consultation, or intervention for patient care.
- (c) Health care facility administrators are authorized to permit access to medical information as necessary to fulfill professional duties. Health care facility administrators shall advise those persons permitted access under this section of the requirement to maintain confidentiality of such information as defined under this section and chapter 70.24 RCW. Professional duties means the following or functionally similar activities:
 - (i) Medical record or chart audits;
 - (ii) Peer reviews;
 - (iii) Quality assurance;
 - (iv) Utilization review purposes;
- (v) Research review board reviews under chapter 42-.48 RCW;
 - (vi) Risk management; and
- (vii) Reviews required under federal or state law or rules.
- (d) Health care facility administrators and health care providers responsible for office management are authorized to permit access to a patient's medical information and medical record by health care facility and medical staff or office staff to carry out duties required for care and treatment of a patient and the management of medical information and the patient's medical record.
- (e) Health care facility administrators are authorized to permit exchange of medical information for training and teaching of health care providers and students when exchange of confidential medical information is necessary for such training and specifically related to the care of the patient.
- (3) Health care providers, employees of a health care facility or medical laboratory, and other individuals with knowledge of a person with a reportable disease or condition, other than those specified in subsections (1) and (2) of this section, shall release identifying information only to other individuals responsible for protecting the health and well being of the public through control of communicable and certain other diseases.
- (4) Local and state health department personnel shall maintain individual case reports as confidential records consistent with WAC 248-100-091.
- (5) The Washington state public health laboratory, other laboratories approved as public health referral laboratories, and any persons, institutions, or facilities submitting specimens or records containing patient—identifying information shall maintain the identifying

information accompanying submitted laboratory specimens as confidential records.

(6) Statistical summaries and epidemiologic studies based on individual case reports may be public information provided no individual is identified.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–016, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.24.105. 90–07–033 (Order 043), § 248–100–016, filed 3/14/90, effective 4/14/90. Statutory Authority: Chapter 70.24 RCW. 88–21–093 (Order 322), § 248–100–016, filed 10/19/88; 88–17–057 (Order 317), § 248–100–016, filed 8/17/88. Statutory Authority: RCW 43.20.050. 87–11–047 (Order 302), § 248–100–016, filed 5/19/87.]

WAC 246-100-021 Responsibilities and duties—Health care providers. Every health care provider, as defined in chapter 248-100 WAC, shall:

- (1) Provide adequate, understandable instruction in control measures designed to prevent the spread of disease to:
- (a) Each patient with a communicable disease under his or her care,
 - (b) Family of a patient with a communicable disease,
- (c) Contacts and others as appropriate to prevent spread of disease.
- (2) Ensure notification of the local health officer or local health department regarding:
- (a) Cases of reportable diseases and conditions. See WAC 248-100-071, 248-100-076, and 248-100-081;
- (b) Outbreaks or suspected outbreaks of disease. See WAC 248-100-071, 248-100-076, and 248-100-081;
- (c) Known barriers which might impede or prevent compliance with orders for infection control or quarantine; and
- (d) Name, address, and other pertinent information for any case or carrier refusing to comply with prescribed infection control measures.
- (3) Cooperate with public health authorities during investigation of:
- (a) Circumstances of a case or suspected case of a reportable disease or condition or other communicable disease, and
- (b) An outbreak or suspected outbreak of illness. Comply with requirements in WAC 248-100-206, 248-100-211, and 248-100-217.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–021, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.104 RCW. 90–10–036 (Order 049), § 248–100–021, filed 4/26/90, effective 5/27/90. Statutory Authority: RCW 43.20.050. 87–11–047 (Order 302), § 248–100–021, filed 5/19/87.]

WAC 246-100-026 Responsibilities and duties--Veterinarians. (1) Veterinarians shall:

- (a) Notify the local health officer of any human case, suspected case, outbreak, or suspected outbreak of reportable disease listed in WAC 248-100-076;
- (b) Notify the state veterinarian, Washington state department of agriculture, within one working day of any animal case, suspected case, outbreak, or suspected outbreak of:
 - (i) Anthrax,
 - (ii) Brucellosis,
 - (iii) Equine encephalitis,

- (iv) Plague,
- (v) Rabies,
- (vi) Psittacosis, and
- (vii) Tuberculosis.
- (2) Upon receipt of a report of human disease, the state health officer shall immediately notify the state veterinarian of reports of:
 - (a) Anthrax,
 - (b) Brucellosis,
 - (c) Psittacosis,
 - (d) Equine encephalitis,
 - (e) Plague,
 - (f) Rabies, and
 - (g) Tuberculosis in an animal handler.
- (3) Upon receipt of a report of animal disease, the state veterinarian shall notify the state health officer of reports of:
 - (a) Anthrax,
 - (b) Brucellosis excluding Strain 19 disease,
 - (c) Psittacosis,
 - (d) Equine encephalitis,
 - (e) Plague,
 - (f) Rabies, and
 - (g) Tuberculosis.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-100-026, filed 12/27/90, effective 1/31/91; 88-07-063 (Order 308), § 248-100-026, filed 3/16/88.]

WAC 246-100-031 Responsibilities and duties—Laboratory directors. The director of each medical laboratory in the state shall:

- (1) Register the laboratory with the department as described in WAC 248-100-221.
- (2) Submit microbiologic cultures or subcultures or appropriate clinical material to the Washington state public health laboratory or other laboratory designated by the state health officer, as described in WAC 248–100–231.
- (3) Report to the local health officer or state health officer certain positive test results, as described in WAC 248-100-236.
- (4) Cooperate with local and state health department personnel in the investigation of an outbreak, suspected outbreak, case, suspected case, carrier, or contact of a communicable disease or reportable disease or condition, as described in WAC 248-100-241.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–031, filed 12/27/90, effective 1/31/91; 87–11–047 (Order 302), § 248–100–031, filed 5/19/87.]

WAC 246-100-036 Responsibilities and duties— Local health officers. (1) The local health officer shall review and determine appropriate action for:

- (a) Each reported case or suspected case of a reportable disease or condition;
- (b) Any disease or condition considered a threat to public health;
- (c) Each reported outbreak or suspected outbreak of disease, requesting assistance from the department in carrying out investigations when necessary; and

- (d) Instituting disease prevention and infection control, isolation, detention, and quarantine measures necessary to prevent the spread of communicable disease, invoking the power of the courts to enforce these measures when necessary.
 - (2) Local health officers shall:
- (a) Submit reports to the state health officer as required in chapter 248-100 WAC;
- (b) Establish a system at the local health department for maintaining confidentiality of written records and written and telephoned disease case reports consistent with WAC 248-100-016;
- (c) Notify health care providers within the health district regarding requirements in this chapter;
- (d) Distribute appropriate report forms to persons responsible for reporting;
- (e) Notify the principal health care provider, if possible, prior to initiating a case investigation by the local health department;
- (f) Make HIV testing, AIDS counseling, and pretest and post-test counseling, as defined in this chapter, available for voluntary, mandatory, and anonymous testing and counseling as required by RCW 70.24.400;
- (g) Make information on anonymous HIV testing, AIDS counseling, and pretest and post-test counseling, as described under WAC 248-100-208 and 248-100-209, available;
- (h) Use identifying information on HIV-infected individuals provided according to WAC 248-100-072 only:
- (i) For purposes of contacting the HIV-positive individual to provide test results and post-test counseling; or
- (ii) To contact sex and injection equipment-sharing partners; and
- (i) Destroy documentation of referral information established in WAC 248-100-072 and this subsection containing identities and identifying information on HIV-infected individuals and at-risk partners of those individuals immediately after notifying partners or within three months, whichever occurs first.
 - (3) Each local health officer has the authority to:
- (a) Carry out additional steps determined to be necessary to verify a diagnosis reported by a health care provider;
- (b) Require any person suspected of having a reportable disease or condition to submit to examinations required to determine the presence of the disease or condition; and
- (c) Investigate any case or suspected case of a reportable disease or condition or other illness, communicable or otherwise, if deemed necessary.
- (4) Local health officers shall conduct investigations and institute control measures consistent with those indicated in the fourteenth edition (1985) of Control of Communicable Diseases in Man, edited by Abram S. Benenson, published by the American public health association, except:
- (a) When superseded by more up-to-date measures, or
- (b) When other measures are more specifically related to Washington state.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–036, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.24 RCW. 89–02–008 (Order 324), § 248–100–036, filed 12/27/88. Statutory Authority: RCW 43.20.050. 88–07–063 (Order 308), § 248–100–036, filed 3/16/88.]

WAC 246-100-041 Responsibilities and duties—State health officer. (1) The state health officer shall have authority to:

- (a) Require reporting of cases and suspected cases of disease and conditions in addition to those required in WAC 248-100-076 for a period of time less than thirty-six months when:
- (i) The disease or condition is newly recognized or recently acknowledged as a public health concern, and
- (ii) Epidemiologic investigation based on reports of cases may contribute to understanding of the disease or condition, and
- (iii) Written notification is provided to all local health officers regarding:
 - (A) Additional reporting requirements, and
- (B) Rationale or justification for specifying the disease or condition as reportable.
- (b) Require laboratories to submit specimens indicative of infections in addition to those required in WAC 248-100-231 for a period of time less than thirty-six months, provided:
 - (i) The infection is of public health concern, and
- (ii) Written notification is provided to all local health officers and all directors of medical laboratories registered as described in WAC 248-100-221 explaining:
 - (A) Actions required, and
 - (B) Reason for the addition.
- (2) The state health officer's authorization to require reporting of cases or submission of laboratory specimens, other than those specified in WAC 248-100-076 and 248-100-231, shall expire thirty-six months from the date of written notification of local health officers and laboratory directors unless amended rules are adopted by the state board of health.
- (3) The state health officer shall distribute periodic epidemiologic summary reports and an annual review of public health issues to local health officers and local health departments.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-100-041, filed 12/27/90, effective 1/31/91; 87-11-047 (Order 302), § 248-100-041, filed 5/19/87.]

- WAC 246-100-046 Responsibilities and duties—Cases, suspected cases, carriers, contacts, and others. (1) Persons shall cooperate with public health personnel during:
- (a) Investigation of the circumstances of a case, suspected case, outbreak, or suspected outbreak of a communicable or other disease or condition; and
- (b) Implementation of infection control measures, including isolation and quarantine measures.
- (2) Individuals having knowledge of a person with a reportable disease or condition may notify the local health officer as described in WAC 248-100-071.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as \$ 246–100–046, filed 12/27/90, effective 1/31/91; 87–11–047 (Order 302), \$ 248–100–046, filed 5/19/87.]

- WAC 246-100-071 Responsibility for reporting to and cooperating with the local health department. (1) A principal health care provider in attendance on a case of any reportable disease or condition shall report the case to the local health department as required in this chapter.
- (2) Other health care providers in attendance on a case of a reportable disease or condition shall report the case to the local health department unless the case has already been reported.
- (3) Health care facilities where more than one health care provider may be in attendance on a case of a reportable disease or condition may establish administrative procedures to assure forwarding of reports to the local health department without duplication. Neither the submission of a specimen to a public health laboratory as required in WAC 248–100–231 nor the laboratory reporting a positive test result as required in WAC 248–100–236 relieves the principal health care provider or health care facility from responsibility for reporting to the local health department.
- (4) Individuals knowing about a person suspected to have any reportable disease or condition may report the name, other identifying information, and other known information described in WAC 248–100–081 to the local health department.
- (5) School principals, school nurses, and day care center operators knowing of a case or suspected case of a reportable disease or condition in the school or center shall notify the local health department.
- (6) Each school teacher and day care worker knowing of a case or suspected case of a reportable disease or condition shall report the name and other identifying information to the principal, school nurse, or day care center operator.
- (7) Medical laboratories shall report laboratory evidence of certain reportable diseases to the local or state health department as described in WAC 248-100-236.
- (8) Health care providers, health care facilities, laboratory directors, and individuals shall cooperate with the local health officer in the investigation of a case or suspected case of a reportable disease or condition, and shall, when requested by the local health officer, provide in a timely manner any information related to the clinical, laboratory, and epidemiologic circumstances of the case or suspected case.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–071, filed 12/27/90, effective 1/31/91; 87–11–047 (Order 302), § 248–100–071, filed 5/19/87.]

- WAC 246-100-072 Rules for notification of partners at-risk of HIV infection. (1) A health care provider may consult with the local health officer or an authorized representative about an HIV-infected individual without identifying the individual.
- (2) Only under the specific circumstances listed below, a principal health care provider shall report the identity of sex or injection equipment-sharing partners

of an HIV-infected individual to the local health officer or an authorized representative:

- (a) After being informed of the necessity to notify sex and injection-equipment sharing partners, the HIV-infected individual either refuses or is unable to notify partners that partners:
- (i) May have been exposed to and infected with HIV;
- (ii) Should seek HIV-pretest counseling and consider HIV testing; and
- (b) The HIV-infected individual neither accepts assistance nor agrees to referral to the local health officer or an authorized representative for assistance in notifying partners.
- (3) Only in the specific circumstances listed below, a principal health care provider shall report the identity of an individual with a positive HIV test result to the local health officer or an authorized representative:
- (a) The principal health care provider provided pretest counseling as described in WAC 248-100-209(1) before the individual was tested; and
- (b) The principal health care provider made efforts, but was unable to meet face—to—face with the individual to notify the individual of the HIV—test result and to provide post—test counseling as required in WAC 248—100—209 in order to assure partner notification.
- (4) A health care provider shall not disclose the identity of an HIV-infected individual or the identity of sex and injection equipment-sharing partners at risk of HIV infection, except as authorized in RCW 70.24.105, WAC 248-100-072, or 248-100-076.
- (5) Local health officers and authorized representatives shall:
- (a) Confirm conditions in subsections (2) and (3) of this section were met prior to initiating partner notification or receiving referral of identity of an HIV-infected individual; and
- (b) Use identifying information, provided according to this section, on HIV-infected individuals only for contacting the HIV-infected individual to provide post-test counseling or to contact sex and injection equipment-sharing partners; and
- (c) Destroy documentation of referral information established under this subsection, containing identities and identifying information on the HIV-infected individual and at-risk partners of that individual, immediately after notifying partners or within three months of the date information was received, whichever occurs first.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-100-072, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.24 RCW. 89-02-008 (Order 324), § 248-100-072, filed 12/27/88.]

WAC 246-100-076 Reportable diseases and conditions. (1) The following diseases and conditions shall be reported as individual case reports to the local health department in accordance with requirements and procedures described throughout chapter 248-100 WAC:

- (a) Category A diseases require an immediate report at the time a case is suspected or diagnosed and include:
 - (i) Anthrax,

- (ii) Botulism (including food-borne, infant, and wound),
 - (iii) Cholera,
 - (iv) Diphtheria, noncutaneous,
 - (v) Measles (rubeola),
 - (vi) Paralytic shellfish poisoning,
 - (vii) Plague,
 - (viii) Poliomyelitis, and
 - (ix) Rabies.
- (b) Category B diseases or conditions require a case report within one day of diagnosis and include:
 - (i) Brucellosis,
- (ii) Gastroenteritis of suspected food-borne or waterborne origin,
- (iii) Hemophilus influenzae invasive disease (excluding otitis media) in children age five years and under,
 - (iv) Hepatitis A and B, acute,
 - (v) Leptospirosis,
 - (vi) Listeriosis,
 - (vii) Meningococcal disease,
 - (viii) Paratyphoid fever (see salmonellosis),
 - (ix) Pertussis,
 - (x) Rubella, including congenital,
- (xi) Salmonellosis, including paratyphoid fever and typhoid fever,
 - (xii) Shigellosis,
- (xiii) Syphilis—primary, secondary, or congenital (for other, see Category C),
- (xiv) Typhoid fever, including carrier (see salmonellosis),
- (xv) Unusual communicable disease (see definition WAC 248-100-011).
- (c) Category C diseases or conditions require a case report within seven days of diagnosis and include:
- (i) Acquired immunodeficiency syndrome (AIDS) and class IV human immunodeficiency virus (HTLV III or LAV diseases classified by centers for disease control, United States public health service, MMWR, 5/23/86),
 - (ii) Amebiasis,
 - (iii) Campylobacteriosis,
 - (iv) Chancroid,
 - (v) Chlamydia trachomatis infection,
 - (vi) Ecoli 0157:H7 infection,
 - (vii) Encephalitis, viral,
 - (viii) Giardiasis,
 - (ix) Gonorrhea,
 - (x) Granuloma inguinale,
 - (xi) Herpes simplex, initial genital infection,
 - (xii) Herpes simplex, neonatal,
 - (xiii) Hepatitis non-A, non-B, and unspecified,
 - (xiv) Kawasaki syndrome,
 - (xv) Legionellosis,
 - (xvi) Leprosy (Hansen's disease),
 - (xvii) Lyme disease,
 - (xviii) Lymphogranuloma venereum,
 - (xix) Malaria,
 - (xx) Mycobacteriosis, including tuberculosis,
 - (xxi) Mumps,
 - (xxii) Nongonococcal urethritis,
 - (xxiii) Pelvic inflammatory disease, acute,

- (xxiv) Pseudomonas folliculitis of suspected waterborne origin,
 - (xxv) Psittacosis,

(xxvi) Q fever,

(xxvii) Relapsing fever (borreliosis),

(xxviii) Reye Syndrome,

(xxix) Rheumatic fever,

(xxx) Rocky mountain spotted fever,

(xxxi) Syphilis—other (see also Category B),

(xxxii) Tetanus,

(xxxiii) Tick paralysis,

(xxxiv) Toxic shock syndrome,

(xxxv) Trichinosis,

(xxxvi) Tuberculosis,

(xxxvii) Tularemia,

(xxxviii) Vibriosis,

(xxxix) Yersiniosis, and

(xxxx) Severe adverse reaction to immunization.

- (2) Any cluster or pattern of cases, suspected cases, deaths, or increased incidence of any disease or condition beyond that expected in a given period which may indicate an outbreak, epidemic, or related public health hazard shall be reported immediately by telephone to the local health officer. Such patterns include, but are not limited to, suspected or confirmed outbreaks of food borne or waterborne disease, chickenpox, influenza, viral meningitis, nosocomial infection suspected due to contaminated products or devices, or environmentally related disease.
- (3) Local health officers may require reporting of additional diseases and conditions.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–076, filed 12/27/90, effective 1/31/91; 87–11–047 (Order 302), § 248–100–076, filed 5/19/87.]

WAC 246-100-081 Reports-Content-Time-Hospital monthly report permitted for certain diseases.

- (1) Health care providers, health care facilities, and others as required in chapter 248–100 WAC shall report each case of a reportable disease or condition (Category A, B, and C), to the local health officer including the following information:
 - (a) Name,
 - (b) Address,
 - (c) Age,
 - (d) Sex.
- (e) Diagnosis or suspected diagnosis of disease or condition,
- (f) Identity of the principal health care provider (minimally first and last name), and
- (g) Name and address or telephone number of the person providing the report.
- (2) Local health officers may require other information of epidemiologic or public health value including but not limited to:
 - (a) Immunization status,
- (b) History and circumstances of possible exposure or source,
 - (c) Identity of contacts at risk for disease, if known,
 - (d) Occupation, school, or day care of case,
 - (e) Date of onset of disease or condition, and

- (f) Race.
- (3) Health care providers, health care facilities, and others required in chapter 248–100 WAC to report cases of disease or conditions shall:
- (a) Immediately telephone the report of each case or suspected case of Category A disease or condition, WAC 248-100-076, to the local health department,
- (b) Telephone a report of Category B disease or condition, WAC 248–100–076, to the local health department no later than one working day following diagnosis,
- (c) Submit a written report of each Category C disease or condition, WAC 248-100-076, to the local health department within seven days of diagnosis including:
- (i) Completion of an individual case report form provided or approved by the local health department, or
 - (ii) A telephone report if:
- (A) Telephone reports are approved by the local health officer, and
- (B) The local health officer assumes responsibility for completion of the written case report form.
 - (4) Hospitals may:
- (a) Elect a monthly reporting system only for certain category C diseases or conditions including:
 - (i) Chlamydia trachomatis infection;
 - (ii) Kawasaki syndrome;
 - (iii) Leprosy (Hansen's disease);
 - (iv) Mumps;
 - (v) Mycobacteriosis, excluding tuberculosis;
- (vi) Pelvic inflammatory disease, acute including those diseases classified as pelvic inflammatory disease in international classification of diseases, 9th revision, clinical modification, volume I and II, 1980;
 - (vii) Reye syndrome; and
 - (viii) Toxic shock syndrome.
 - (b) Be waived from requirements to report:
 - (i) Initial genital herpes simplex infection,
 - (ii) Nongonococcal urethritis, and
- (iii) Pseudomonas folliculitis of suspected waterborne origin.
 - (5) Hospitals shall:
- (a) Report immediately by telephone any outbreak or suspected outbreak (see WAC 248-100-076).
- (b) Include in monthly reports permitted only for certain diseases specified in subsection (4) of this section, at least:
 - (i) Name of case,
 - (ii) Date of admission or outpatient visit, and
 - (iii) Name of principal health care provider.
- (6) Principal health care providers shall report each case of disease or condition, including those listed in subsection (4) of this section within seven days of diagnosis and as specified in subsection (3) of this section.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–081, filed 12/27/90, effective 1/31/91; 87–11–047 (Order 302), § 248–100–081, filed 5/19/87.]

WAC 246-100-086 Reporting diseases and conditions directly to department. (1) Health care providers and health care facilities shall telephone reports directly

to the department for diseases and conditions under WAC 248-100-076 when:

- (a) A local health department is closed at the time a case or suspected case of a category A reportable disease occurs, and
- (b) A local health department is closed at the time an outbreak or suspected outbreak occurs (see WAC 248–100–076).
- (2) The twenty-four hour department telephone number for reporting diseases or conditions under WAC 248-100-076 is (206) 361-2914 or SCAN 245-2914.
- (3) Health care providers and health care facilities shall telephone reports of pesticide poisoning cases or suspected pesticide poisoning cases under RCW 70.104-.055 directly to the department of health by dialing the twenty-four hour toll-free telephone number 1-800-356-2323.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–086, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.104 RCW. 90–10–036 (Order 049), § 248–100–086, filed 4/26/90, effective 5/27/90. Statutory Authority: RCW 43.20.050. 87–11–047 (Order 302), § 248–100–086, filed 5/19/87.]

WAC 246-100-091 Handling of reports by local health department—Handling of reports by department. (1) The local health officer or local health department shall:

- (a) Notify the department immediately by telephone of any report of a case or suspected case of a category A disease or condition,
- (b) Submit a department-approved individual case report form for each case of any reportable disease or condition to the department within seven days of completing the investigation and report. (The state health officer may waive the requirement to submit an individual case report if pertinent information was provided by phone.)
- (c) Submit a written report on forms approved by the department for a cluster or outbreak of food borne or waterborne disease within seven days of completing the investigation. (The state health officer may waive the requirements to submit a written report if pertinent information was provided to the department by phone.)
- (d) Maintain confidentiality procedures related to disclosure of identity of cases and suspected cases as specified in subsection (2) of this section.
- (2) The state health officer and designees shall establish and maintain confidentiality procedures related to employee handling of all reports of cases and suspected cases, prohibiting disclosure of report information identifying an individual case or suspected cases except:
- (a) To employees of the local health department, or other official agencies needing to know for the purpose of administering public health laws,
- (b) To health care providers, specific designees of health care facilities, laboratory directors, and others for the purpose of collecting additional information about a case or suspected case as required for disease prevention and control.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–091, filed 12/27/90, effective 1/31/91; 87–11–047 (Order 302), § 248–100–091, filed 5/19/87.]

- WAC 246-100-166 Immunization of day care and school children against certain vaccine-preventable diseases. (1) Definitions for purposes of this section:
- (a) "Certificate of immunization status (CIS) form" means a form provided by the department labeled DSHS 13-263, including data entry spaces for immunization information including:
 - (i) Name of child or student,
 - (ii) Birth date,
 - (iii) Sex,
 - (iv) Type of vaccine,
- (v) Date of each dose of vaccine received specifying day, month, and year,
- (vi) Signature of parent, legal guardian, or adult in loco parentis, and
- (vii) Documented exemptions, if applicable and as specified in subsection (5) of this section.
 - (b) "Chief administrator" means:
- (i) The person with the authority and responsibility for the immediate supervision of the operation of a school, day care center, or
- (ii) A designee of the chief administrator assigned in writing to carry out the requirements of RCW 28A.31.118 through the statutory or corporate board of directors of the school district or school, or
- (iii) Person or persons with the authority and responsibility for the general supervision of the operation of the school district or school.
- (c) "Child" means any person regardless of age admitted to any day care center, preschool, kindergarten, or grades one through twelve program of education in:
 - (i) Any public school district, or
- (ii) Any private school or private institution subject to approval by the state board of education or described in RCW 28A.04.120(4) and 28A.02.201 through 28A.02.260.
- (d) "Full immunization" means vaccinated in accordance with schedules and immunizing agents approved by the state board of health in WAC 248-100-166 against:
 - (i) Diphtheria,
 - (ii) Tetanus,
 - (iii) Pertussis or whooping cough,
 - (iv) Measles or rubeola,
 - (v) Rubella,
 - (vi) Mumps, and
 - (vii) Poliomyelitis.
- (e) "Immunizing agents" means any vaccine or other biologic licensed and approved by the bureau of biologics, United States Food and Drug Administration (FDA), for immunization of persons against:
 - (i) Diphtheria, tetanus, pertussis (DTP, DT, Td);
 - (ii) Measles;
 - (iii) Mumps;
- (iv) Poliomyelitis, types I, II, and III (TOPV, IPV); and
 - (v) Rubella;
- (f) "National immunization guidelines" means schedules for immunization described in:
- (i) 1986 American Academy of Pediatrics (AAP) red book; or

- (ii) Advisory Committee on Immunization Practices (ACIP) on General Recommendations on Immunization, January 14, 1983; and
- (iii) New Recommended Schedule for Active Immunization of Normal Infants and Children, 9/19/86, Advisory Committee on Immunization Practices (ACIP), United States public health service.
 - (g) "Parent" means a person who is:
- (i) The mother, father, legal guardian, or designated caretaker of a child seventeen years of age or younger; or
 - (ii) A person eighteen years of age or older; or
 - (iii) An emancipated minor.
- (h) "Transfer student" means a student previously enrolled in grades kindergarten through twelve moving from one school district or system to another at any time during the school year, excluding students transferring within a district or system when the school transfers records within the district.
- (2) Full immunization schedule. Each day care, preschool, and school shall establish and maintain requirements for full immunization of children attending day care and preschool through grade twelve.
- (3) For day care and preschool children, full immunization means a child received vaccines consistent with the National Immunization Guidelines defined in subsection (1) of this section and including:
 - (i) DTP, DT, or Td;
 - (ii) Polio;
 - (iii) Measles;
 - (iv) Mumps; and
 - (v) Rubella.
- (4) For a child commencing school entry (kindergarten or first grade) attendance, on or after August 1, 1988, full immunization means a child received vaccines as follows:
- (a) A minimum of four doses of either DTP, DT, or Td with last dose after four years of age and excluding tetanus toxoid only, consistent with national immunization guidelines defined in subsection (1) of this section, or
- (b) Three doses of Td excluding tetanus toxoid only if the series began at seven years of age or older, and
- (c) A minimum of three doses of trivalent oral poliomyelitis vaccine (TOPV) or four doses of trivalent inactivated poliomyelitis vaccine (IPV) with last dose received after four years of age and consistent with national immunization guidelines defined in subsection (1) of this section, and
- (d) One dose of live virus measles vaccine at or after one year of age unless a child provides proof of past infection with measles virus (an acceptable measles virus antibody titer result), and
- (e) One dose of live virus rubella vaccine at or after one year of age unless a child provides proof of past infection with rubella virus (an acceptable rubella antibody titer result), and
- (f) One dose of live virus mumps vaccine administered at or after one year of age for children in kindergarten or first grade, whichever is the entry level.

- (5) For a child who commenced kindergarten or first grade school attendance before August 1, 1988, and for transfer students, full immunization means a child received vaccines as follows:
- (a) A minimum of three doses of either DTP, DT, or Td, with the last dose after four years of age and excluding tetanus toxoid only, consistent with national immunization guidelines defined in subsection (1) of this section; or
- (b) Three doses of Td, excluding tetanus toxoid only, if the series began at seven years of age or older; and
- (c) A minimum of three doses of trivalent oral poliomyelitis vaccine (TOPV), or four doses of trivalent inactivated poliomyelitis vaccine (IPV) with the last dose received after four years of age and consistent with national immunization guidelines defined in subsection (1) of this section; and
- (d) One dose of live virus measles vaccine at or after one year of age unless a child provides written proof from a physician of past infection with measles virus documenting month and year of disease occurrence; and
- (e) One dose of live virus rubella vaccine at or after one year of age unless a child provides proof of past infection with rubella virus (an acceptable rubella antibody titer result); and
- (f) One dose of live virus mumps vaccine administered at or after one year of age for children in kindergarten or first grade, whichever is entry level.
- (6) Conditions for day care, preschool, and school attendance when a child is not fully immunized:
- (a) When a child lacks full immunization, the day care, preschool, or school shall require satisfactory progress toward full immunization as a condition of school attendance including:
- (i) Documented proof of start or continuance of child's schedule of immunization;
- (ii) Assurance the scheduled immunization is consistent with the national immunization guidelines defined in subsection (1) of this section;
- (iii) Proof of completion of the required immunization or immunizations for admission the following year, no later than the child's first day of attendance; and
- (iv) Issuance of an order of exclusion as described in subsection (10) of this section if:
- (A) Sufficient time for completion of required immunizations elapses, and
- (B) The child has not completed the required immunizations in time.
- (b) When immunization schedules are incomplete due to insufficient time, the chief administrator shall:
- (i) Notify the child's parents of when the schedule must be completed, and
- (ii) Issue an order of exclusion if not completed by that date.
- (7) Schools, preschools, and day care centers shall require documented proof related to immunization including:
- (a) Completion of a certificate of immunization status (CIS) form by a parent as documented proof of:
 - (i) Full immunization, or
 - (ii) Initiation or continuation of a schedule, or

- (iii) Exemption.
- (b) Information from a written personal immunization record, given to the immunized person or to his or her parent by the physician or agency administering the immunization, as the source of the immunization data entered on the CIS form and prohibiting substitution of a personal immunization record for a CIS form;
- (c) Acceptance of only the revised CIS form from new enrollees registering in kindergarten through grade twelve;
- (d) In addition to current CIS form, acceptance of previous CIS forms, DSHS 13-263, or locally developed forms approved by the department indicating the month and year of each immunization as the official immunization status for children enrolled prior to September 1, 1979; and
- (e) No additional proof of immunization as a condition to attend a particular day care, preschool, or school if the school keeps the CIS or other department—approved forms for children verifying:
 - (i) Proof of full immunization, or
 - (ii) Proof of exemption from immunization.
- (8) Schools, preschools, and day care centers shall accept medical exemptions and:
- (a) Require a signature of a licensed physician to certify medical reasons to defer one or more immunizations on the CIS form;
- (b) Admit children and keep on file a CIS form for children with:
- (i) Temporary exemption from immunization for medical reasons if the required immunizations are received upon expiration of the exemption, or
 - (ii) Permanent exemptions.
- (c) Include a statement on the CIS form informing the parent that should an outbreak of vaccine preventable disease for which the child is exempted occur, the child may be excluded from school or day care for the duration of the outbreak by order of the local health department as described in subsection (10) of this section; and
- (d) Keep on file a list of children so exempted and transmit the list to the local health department if requested.
- (9) Schools, preschools, and day care centers shall accept religious, philosophical or personal exemptions and:
- (a) Allow a parent to exempt their child from the required immunizations for religious, philosophical, or personal objections when the CIS form indicates:
 - (i) Type or exemption, and
 - (ii) Signature of parent.
- (b) Admit children and keep on file a CIS form for each child so enrolled;
- (c) Include a statement on the CIS form informing the parent that should an outbreak of vaccine preventable disease for which the child is exempted occur, the child may be excluded from school for the duration of the outbreak by order of the local health department as described in subsection (10) of this section; and
- (d) Keep on file a list of children so exempted and transmit the list to the local health department if requested.

- (10) Schools, preschools, and day care centers shall exclude children from school as follows:
- (a) Exclude any child from school for failure to provide a completed CIS form as defined in subsection (1) of this section before or on the child's first day of attendance consistent with procedures required by the state board of education, Title 180 WAC;
- (b) Exclude from attendance any child in a day care center for failure to provide a completed CIS form as defined in subsection (1) of this section before or on the child's first day of attendance;
- (c) The chief administrator shall retain records on excluded children for at least three years including:
 - (i) Name,
 - (ii) Address, and
 - (iii) Date of exclusion.
- (d) A health officer may exclude children from school, preschool, and day care attendance in the event of a child's exposure to a disease according to chapter 248–101 WAC, including children presenting proof of:
 - (i) Initiation of a schedule of immunization,
 - (ii) Medical exemption,
 - (iii) Religious exemption,
 - (iv) Philosophical exemption, or
 - (v) Personal exemption.
- (11) Schools, preschools, and day care centers shall maintain records and require:
- (a) A completed CIS form retained in the files for every child enrolled;
- (b) Return of records to the parent in the event of the child's withdrawal from school or transfer including:
 - (i) The original CIS form; or
 - (ii) A legible copy of the CIS form; and
- (iii) Prohibiting withholding of a record for nonpayment of school, preschool, or day care fees or any other reason.
- (c) Access to immunization records for each child enrolled by agents of the state or local health department.
- (12) Persons or organizations administering immunizations, either public or private, shall:
- (a) Furnish each person immunized, or his or her parent, with a written record of immunization containing information required by the state board of health; and
- (b) Provide immunizations and records in accordance with chapter 248-100 WAC.
- (13) Chief administrators of schools, preschools, and day care centers shall report as follows:
- (a) The chief administrator of each school shall forward a written annual report to the department and local health department on the immunization status of children in school:
- (i) By October 15 of each year, except in the event of a late school opening when the report is due thirty days after the first day of school; and
 - (ii) On forms provided by the department.
- (b) The chief administrator of each preschool and day care center shall forward a written annual report to the department and local health department on the immunization status of children in preschool or day care on forms provided by the department.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-100-166, filed 12/27/90, effective 1/31/91; 88-07-063 (Order 308), § 248-100-166, filed 3/16/88.]

- WAC 246-100-171 Special settings--Food service establishments. (1) Food handlers with communicable disease in an infectious or carrier state shall not handle food or beverages if the infectious agent can be transmitted through food or beverages.
- (2) Employers or persons in charge of food service establishments shall prohibit persons from work as food handlers with a known disease, condition, and/or carrier state including, but not limited to:
 - (a) Amebiasis;
 - (b) B hemolytic streptococcal infection;
 - (c) Campylobacter;
 - (d) Cholera;
 - (e) Hepatitis A and Hepatitis unspecified;
 - (f) Salmonellosis, including typhoid and paratyphoid;
 - (g) Shigellosis;
 - (h) Staphylococcal infections; and
 - (i) Signs of undiagnosed infection including:
- (A) Diarrhea (with episodes of over forty-eight hours requiring approval by a health care provider or local health officer prior to return to work);
 - (B) Skin lesions;
 - (C) Vomiting; or
 - (D) Fever.
- (3) Work restrictions, control measures, and removal of work restrictions on food handlers and food service establishments shall be consistent with:
- (a) Control of Communicable Diseases in Man, 14th edition, Abram S. Benenson (editor), American public health association, 1985;
- (b) Chapter 248-84 WAC food service sanitation, rules, and regulations of the Washington state board of health; and
- (c) Chapter 69.06 RCW, food and beverage establishments, workers permits.
- (4) Employers and persons in charge of food service establishments shall:
- (a) Require notification or approval of removal of work restriction by a health care provider or local health officer for persons working with diseases, carrier states, conditions and signs listed in subsection (2) of this section; and
- (b) Cooperate with public health officials investigating cases, outbreaks, or suspected outbreaks.
 - (5) The local health department has authority to:
- (a) Require an examination of a person or persons to determine presence of infection,
- (b) Adopt more stringent rules for excluding a food handler from work, and
- (c) Protect public safety consistent with chapter 248-84 WAC by ordering food items to be:
 - (i) Placed under a hold order,
 - (ii) Destroyed immediately,
 - (iii) Surrendered,
 - (iv) Sampled, and
 - (v) Submitted for laboratory testing.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-100-171, filed 12/27/90, effective 1/31/91; 88-07-063 (Order 308), § 248-100-171, filed 3/16/88.]

WAC 246-100-176 Special settings—Schools. Private and public schools, vocational schools, colleges, and universities shall cooperate with local and state health officers in carrying out requirements in chapters 248-101 and 248-100 WAC.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-100-176, filed 12/27/90, effective 1/31/91; 88-07-063 (Order 308), § 248-100-176, filed 3/16/88.]

WAC 246-100-181 Special settings--Child day care facilities. Child day care facilities shall:

- (1) Establish policy and procedures for prevention and control of communicable diseases in employees, voluntary staff, and children that:
- (a) Are consistent with "child health care plan guidelines" available from division of health, office of licensing and certification, personal care facilities survey section, ET-33, Olympia, Washington 98504; and/or
- (b) Are consistent with additional or more stringent recommendations of the local health department; and
- (c) Include a provision for reporting illness to the local health department when required in chapter 248–100 WAC and WAC 388–73–056.
- (2) Consult with a health care provider or the local health department for information about infectious or communicable disease, as necessary.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–181, filed 12/27/90, effective 1/31/91; 88–07–063 (Order 308), § 248–100–181, filed 3/16/88.]

WAC 246-100-186 Special settings—Health care facilities. Health care facilities shall:

- (1) Adopt written policy and procedures restricting work of employees, staff, students, and volunteers diagnosed to have a communicable disease from direct contact with patients, residents, and recipients of care during the period of communicability when:
- (a) Transmission of the disease to recipients of care or other employees can occur in that particular job environment, and
 - (b) The disease can cause serious illness.
- (2) Permit employees, staff, students, and volunteers to return to work when measures have been taken to prevent transmission of disease if:
- (a) Measures are consistent with recommendations of an infection control committee or equivalent authorized group if existing, and
- (b) Measures are consistent with recommendations of local health officer.
- (3) Comply with applicable state licensure law and department rules regarding communicable disease screening and control.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-100-186, filed 12/27/90, effective 1/31/91; 88-07-063 (Order 308), § 248-100-186, filed 3/16/88.]

- WAC 246-100-191 Animals, birds, pets--Measures to prevent human disease. (1) All persons and entities are prohibited from:
- (a) Sale of milk, meat, hides, and hair from animals infected with anthrax; and
- (b) Sale and display of turtles except as permitted under Title 21 CFR, Food and Drug Administration, part 1240.62, 1986.
- (2) Except for bonafide public or private zoological parks, persons and entities are prohibited from:
- (a) Importing into Washington state any bat, skunk, fox, raccoon, or coyote without a permit from the director of the Washington state department of agriculture, as required in WAC 16-54-125; and
- (b) Acquiring, selling, bartering, exchanging, giving, purchasing, or trapping for retention as pets or for export any:
 - (i) Bat,
 - (ii) Skunk,
 - (iii) Fox,
 - (iv) Raccoon, and
 - (v) Coyote.
- (3) Local health officers shall determine whether or not to order the destroying or testing of animals other than cats and dogs if:
- (a) The animal has bitten or otherwise exposed a person, and
 - (b) Rabies is suspected.
- (4) When an animal has bitten or otherwise exposed a person, the local health officer shall institute any or all of the following as judged appropriate:
 - (a) Order testing and destruction of the animal,
- (b) Order restriction of dogs and cats for ten days observation,
- (c) Require examination and recommendation by a veterinarian related to signs of rabies, or
- (d) Specify other appropriate actions for animals considered low risk for rabies.
- (5) When an animal other than a bat is found to be rabid, the local health officer shall immediately institute a community—wide rabies control program including:
- (a) Issuance of orders to pick up and impound all stray and unlicensed dogs and cats,
- (b) Issuance of orders to owners of dogs and cats requiring proof of rabies vaccination of animals by a veterinarian within six previous months,
- (c) Restriction of household mammals to owners' premises except when on a leash, or
- (d) Institute actions other than subsection (5)(a), (b), and (c) of this section when judged appropriate.
- (6) A person destroying an animal as described in this section shall:
 - (a) Avoid damaging the brain; and
- (b) Transport the dead animal's head, brain, or body in a manner approved by the local health department.
- (7) To improve surveillance for rabies, laboratories shall inform the local health officer prior to testing specimens and samples for rabies.
- (8) When a cat or dog has been bitten or exposed to a rabid or suspected rabid animal, the local health officer shall require:

- (a) Destruction of the exposed animal; or
- (b) Revaccination, if currently vaccinated, including observation by owner for ninety days; or
- (c) If not currently vaccinated, vaccination and strict isolation for six months with revaccination one month prior to release from isolation; or
- (d) Any other action judged appropriate by the local health officer.
- (9) A person importing a dog and/or a cat into Washington state shall comply with WAC 16-54-120.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-100-191, filed 12/27/90, effective 1/31/91; 88-07-063 (Order 308), § 248-100-191, filed 3/16/88.]

WAC 246-100-196 Animal bites—Report to local health department. Health care providers shall:

- (1) Report all cases of humans exposed to secretions or bitten by domestic or wild animals, especially bats and carnivores, to the local health department or designated local authority;
- (2) Report bites of rodents and lagomorphs only when an animal exhibits unusual behavior; and
- (3) Use protocols established in Communicable Diseases in Man, 14th edition, Abram S. Benenson, editor, 1985, when treating wounds caused by animal bites.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-100-196, filed 12/27/90, effective 1/31/91; 88-07-063 (Order 308), § 248-100-196, filed 3/16/88.]

WAC 246-100-201 Birds—Measures to prevent psittacosis. (1) Definitions specific to this section:

- (a) "Breeder" means a person or persons propagating birds for purpose of sale, trade, gift, or display;
- (b) "Displayer" means a person, owner, or entity other than a public or private zoological park showing, exhibiting, or allowing a person or persons to handle or access a bird in a place open to the public or in a health care facility;
- (c) "Leg band" means a smooth plastic or metal cylinder, either open (seamed) or closed (seamless), designed to be used to encircle a leg of a bird including permanent inscription of identification indicating:
 - (i) Code for individual bird, and
- (ii) Code for breeder source except when open bands identify vendor rather than breeder.
- (d) "Psittacine bird" or "bird" means all birds commonly known as:
 - (i) Parrots,
 - (ii) Macaws,
 - (iii) Cockatoos,
 - (iv) Lovebirds,
 - (v) Parakeets, and
 - (vi) All other birds of the order psittaciformes.
- (e) "Vendor" means a person or entity selling, trading, or giving a bird to another person or entity.
- (2) A person selling, trading, or otherwise transferring a bird shall identify each bird by:
 - (a) A coded and closed (seamless) leg band;
- (b) A United States department of agriculture open (seamed) leg band; or

- (c) An open (seamed) leg band only in cases where an original and closed (seamless) leg band was lost or required replacement due to injury or potential injury to the bird.
- (3) A vendor transferring a bird to other than the general public shall maintain a record of transfer including acquisition, sales, and trade of a bird, for at least one year and including:
 - (a) Date of transaction;
 - (b) Name and address of the recipient and source;
- (c) Number and type, including the common name of the bird transferred; and
- (d) Leg band codes, including breeder or vendor and individual bird codes, omitting individual bird code only upon initial transfer of a bird propagated by the breeder.
- (4) A vendor transferring a bird to the general public shall provide each buyer or recipient with:
- (a) A sales slip or written document including all information required in subsection (3)(a), (b), (c), and (d) of this section; and
 - (b) A written warning or caution notice including:
- (i) Information about possible human infection or disease caused by birds, especially psittacosis, parrot fever, and ornithosis;
 - (ii) Signs of infection or a sick bird including:
 - (A) Nasal discharge,
 - (B) Sneezing,
 - (C) Coughing,
 - (D) Ruffled feathers,
 - (E) Lethargy, and
 - (F) Diarrhea.
- (iii) Signs and symptoms of an illness in a human including, but not limited to:
 - (A) Chills,
 - (B) Fever,
 - (C) Headache,
 - (D) Cough, and
 - (E) Muscle aches.
- (iv) Information that nasal discharge and droppings of an infected or sick bird may cause illness in humans; and
- (v) Advice to consult veterinarian or health care provider, as appropriate, if signs or symptoms occur.
- (5) A vendor shall post a readable sign in a public area with a warning described in subsection (4)(b) of this section.
- (6) When investigation of a human case of psittacosis indicates probable infection from a bird, the local health officer shall:
- (a) Order collection of blood or other appropriate samples from the suspect bird or birds for appropriate laboratory tests to rule out disease; or
- (b) Use protocols established in Communicable Discases in Man, 14th edition, Abram S. Benenson, editor, 1985; and
- (c) Have authority to enforce requirements of this section on a nonpsittacine bird or birds when:
 - (i) There is suspected exposure to an infected bird, or
 - (ii) There is evidence a bird caused a disease.
- (7) When a local health officer orders a quarantine of a bird or birds, the vendor shall:

- (a) Cooperate with the local health officer, and
- (b) Assume costs associated with action.
- (8) Upon confirmation of psittacosis, vendors shall follow directions issued by the local health officer to:
- (a) Place the birds under antibiotic treatment with environmental cleaning and sanitizing; or
- (b) Destroy all birds on the premises followed by environmental cleaning and sanitizing; and
- (c) Assume costs associated with psittacosis prevention and control action ordered by local and state health officer;
 - (d) Prohibit sale or addition of birds to inventory; and
 - (e) Prevent contact of any bird with the public.
- (9) A person exhibiting or displaying a bird or birds in a place or area used or occupied by the public shall exhibit the bird or birds in a manner preventing human exposure to the birds and bird discharges except:
 - (a) In single-purpose pet shops and aviaries, and
 - (b) At bird shows if:
- (i) A room containing a bird or birds is separated from other areas and activities, and
- (ii) The room entrance has a sign warning a person about potential exposure to psittacosis.
 - (10) Shipment and embargo of birds.
- (a) Any person or entity receiving a psittacine bird or birds from points outside Washington state shall:
 - (i) Comply with Title 9 CFR, parts 92.3 and 92.8(b);
- (ii) Refuse receipt of any bird originating from premises where psittacosis infection is suspected or known; and
- (iii) Refuse receipt of any bird from a premise quarantined for psittacosis.
 - (b) The state health officer is authorized to:
- (i) Order placement and removal of an embargo upon shipment of a live bird or birds into Washington state, and
- (ii) Order any action necessary to control an outbreak or potential outbreak of psittacosis in Washington state.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–201, filed 12/27/90, effective 1/31/91; 88–07–063 (Order 308), § 248–100–201, filed 3/16/88.]

WAC 246-100-206 Special diseases—Sexually transmitted diseases. (1) Definitions.

- (a) "Behaviors presenting imminent danger to public health (BPID)" means the following activities, under conditions specified below, performed by an individual with a laboratory confirmed HIV infection:
- (i) Anal or vaginal intercourse without a latex condom; or
- (ii) Shared use of blood-contaminated injection equipment;
- (iii) Donating or selling HIV-infected blood, blood products, or semen; and
 - (iv) Under the following specified conditions:
- (A) The infected individual received post-test counseling as described in WAC 248-100-209 prior to repeating activities in subsection (1)(a)(i) and (ii) of this section; and
- (B) The infected individual did not inform the persons, with whom activities described in subsection

- (1)(a)(i) and (ii) of this section occurred, of his or her infectious status.
 - (b) "Behaviors presenting possible risk" means:
- (i) Actual actions resulting in "exposure presenting a possible risk" limited to:
- (A) Anal, oral, or vaginal intercourse excluding conjugal visits; or
 - (B) Physical assault; or
- (C) Sharing of injection equipment or sharp implements; or
- (D) Throwing or smearing of blood, semen, or vaginal fluids; or
 - (ii) Threatened action if:
- (A) The threatening individual states he or she is infected with HIV; and
- (B) The threatened behavior is listed in subsection (1)(b)(i)(A), (B), (C), and (D) of this section; and
- (C) The threatened behavior could result in "exposure presenting a possible risk."
 - (c) "Conduct endangering public health" means:
- (i) Anal, oral, or vaginal intercourse for all sexually transmitted diseases;
 - (ii) For HIV and Hepatitis B:
 - (A) Anal, oral, or vaginal intercourse; and/or
 - (B) Sharing of injection equipment; and/or
- (C) Donating or selling blood, blood products, body tissues, or semen; and
- (iii) Activities described in subsection (1)(d)(i) and (ii) of this section resulting in introduction of blood, semen, and/or vaginal fluids to:
 - (A) Mucous membranes;
 - (B) Eyes;
 - (C) Open cuts, wounds, lesions; or
 - (D) Interruption of epidermis.
- (d) "Exposure presenting possible risk" means one or more of the following:
- (i) Introduction of blood, semen, or vaginal fluids into:
 - (A) A body orifice or a mucous membrane;
 - (B) The eye; or
- (C) An open cut, wound, lesion, or other interruption of the epidermis.
- (ii) A needle puncture or penetrating wound resulting in exposure to blood, semen, and/or vaginal fluids.
- (e) "Reasonably believed" or "reason to believe," in reference to a sexually transmitted disease, means a health officer's belief which:
- (i) For the purpose of investigating the source and spread of disease, is based upon a credible report from an identifiable individual indicating another person is likely to have a sexually transmitted disease (STD) or to have been exposed to a STD; and
- (ii) For the purpose of issuing a written order for an individual to submit to examination, counseling, or treatment is based upon:
- (A) Laboratory test results confirming or suggestive of a STD; or
- (B) A health care provider's direct observation of clinical signs confirming an individual has or is likely to have a STD; or

- (C) Obtaining information directly from an individual infected with a STD about the identity of his or her sexual or needle—sharing contacts when:
- (I) Contact with the infected individual occurred during a period when the disease may have been infectious; and
- (II) The contact was sufficient to transmit the disease; and
- (III) The infected individual is, in the health officer's judgment, credible and believable.
- (f) "Substantial exposure" means physical contact resulting in exposure presenting possible risk, limited to:
- (i) A physical assault upon the exposed person involving blood or semen;
- (ii) Intentional, unauthorized, nonconsensual use of needles or sharp implements to inject or mutilate the exposed person;
- (iii) An accidental parenteral or mucous membrane or nonintact skin exposure to blood, semen, or vaginal fluids.
 - (2) Health care providers shall:
- (a) Report each case of sexually transmitted disease as required in chapter 248-100 WAC, and
 - (b) Instruct each patient regarding:
 - (i) Communicability of the disease, and
- (ii) Requirements to refrain from acts that may transmit the disease to another.
- (c) Ensure completion of a prenatal serologic test for syphilis in each pregnant woman pursuant to RCW 70-.24.090 including:
- (i) Submission of a blood sample for syphilis to a laboratory approved to perform prenatal serologic tests for syphilis, as required in RCW 70.24.090, at the time of the first prenatal visit, and
- (ii) Decide whether or not to omit the serologic test for syphilis if the test was performed elsewhere during the current pregnancy.
- (3) Laboratories, health care providers, and other persons shall deny issuance of a certificate or statement implying an individual is free from sexually transmitted disease.
- (4) Local health officers, health care providers, and others, in addition to requirements in chapter 248–100 WAC, shall comply with the provisions in chapter 70.24 RCW.
 - (5) Prevention of ophthalmia neonatorum.
- (a) Health care providers diagnosing or caring for a patient with gonococcal or chlamydial ophthalmia neonatorum shall report the case to the local health officer or local health department in accordance with the provisions of this chapter.
- (b) The principal health care provider attending or assisting in the birth of any infant or caring for an infant after birth, shall ensure instillation of a department—approved prophylactic ophthalmic agent into the conjunctival sacs of the infant within the time frame established by the department in policy statement of ophthalmia agents approved for the prevention of ophthalmia neonatorum in the newborn, issued June 19, 1981.
- (6) State and local health officers or their authorized representatives shall:

- (a) Have authority to conduct or cause to be conducted an interview and investigation of persons infected or reasonably believed to be infected with a sexually transmitted disease; and
- (b) Use procedures and measures described in WAC 248-100-036(4) in conducting investigations.
- (7) State and local health officers and their authorized representatives shall have authority to:
- (a) Issue written orders for medical examination, testing, and/or counseling under chapter 70.24 RCW, only after:
- (i) All other efforts to protect public health have failed, including reasonable efforts to obtain the voluntary cooperation of the person to be affected by the order; and
- (ii) Having sufficient evidence to "reasonably believe" the individual to be affected by the order:
 - (A) Has a sexually transmitted disease; and
- (B) Is engaging in "conduct endangering public health"; and
- (iii) Investigating and confirming the existence of "conduct endangering public health" by:
- (A) Interviewing sources to assess their credibility and accuracy; and
- (B) Interviewing the person to be affected by the order; and
- (iv) Including in a written order all information required in RCW 70.24.024.
- (b) Issue written orders for treatment under RCW 70.24.022 only after laboratory test results, or direct observation of clinical signs or assessment of clinical data by a physician, confirm the individual has, or is likely to have, a sexually transmitted disease;
- (c) Issue written orders to cease and desist from specified activities, under RCW 70.24.024 only after:
- (i) Determining the person to be affected by the order is engaging in "conduct endangering public health"; and
- (ii) Laboratory test results, or direct observation of clinical signs or assessment of clinical data by a physician, confirm the individual has, or is likely to have, a sexually transmitted disease; and
- (iii) Exhausting procedures described in subsection (7)(a) of this section; and
- (iv) Enlisting, if appropriate, court enforcement of the orders described in subsections (7)(a) and (b) of this section; and
- (d) Seek court orders for detainment under RCW 70-.24.034, only for persons infected with HIV and only after:
- (i) Exhausting procedures described in subsection (7)(a), (b), and (c) of this section; and
- (ii) Enlisting, if appropriate, court enforcement of orders to cease and desist; and
- (iii) Having sufficient evidence to "reasonably believe" the person is engaging in "behaviors presenting an imminent danger to public health."
- (8) Conditions for detainment of individuals infected with sexually transmitted disease.
- (a) A local health officer may notify the state health officer if he or she determines:

- (i) The criteria for "behaviors presenting imminent danger to public health (BPID)" are met by an individual; and
- (ii) Such individual fails to comply with a cease and desist order affirmed or issued by a court.
- (b) A local or state health officer may request the prosecuting attorney to file an action in superior court to detain an individual specified in subsection (8)(a) of this section.
- (c) The requesting local or state health officer or authorized representative shall:
- (i) Notify the department prior to recommending the detainment setting where the individualized counseling and education plan may be carried out consistent with subsections (8)(d), (e), and (f) of this section;
- (ii) Make a recommendation to the court for placement of such individual consistent with subsections (8)(d) and (f) of this section; and
- (iii) Provide to the court an individualized plan for education and counseling consistent with subsection (8)(e) of this section.
- (d) State board of health requirements for detainment of individuals demonstrating BPID:
- (i) Sufficient number of staff, caregivers, and/or family members to:
- (A) Provide round-the-clock supervision, safety of detainee, and security; and
 - (B) Limit and restrict activities to prevent BPID; and
- (C) Make available any medical, psychological, or nursing care when needed; and
- (D) Provide access to AIDS education and counseling; and
- (E) Immediately notify the local or state health officer of unauthorized absence or elopement; and
 - (ii) Sufficient equipment and facilities to provide:
- (A) Meals and nourishment to meet nutritional needs; and
 - (B) A sanitary toilet and lavatory; and
 - (C) A bathing facility; and
- (D) Bed and clean bedding appropriate to size of detainee; and
- (E) A safe detention setting appropriate to chronological and developmental age of detainee; and
 - (F) A private sleeping room; and
 - (G) Prevention of sexual exploitation.
- (iii) Sufficient access to services and programs directed toward cessation of BPID and providing:
- (A) Linguistically, socially, culturally, and developmentally appropriate ongoing AIDS education and counseling; and
- (B) Psychological and psychiatric evaluation and counseling; and
- (C) Implementation of court-ordered plan for individualized counseling and education consistent with subsection (8)(e) of this section.
- (iv) If required, provide access to isolation and/or restraint in accordance with restraint and seclusion rules in WAC 275-55-263 (2)(c);
- (v) Maintain a safe, secure environment free from harassment, physical danger, and sexual exploitation.

- (e) Washington state board of health standards for an individualized counseling and education plan for a detainee include:
- (i) Consideration of detainee's personal and environmental characteristics, culture, social group, developmental age, and language;
- (ii) Identification of habitual and addictive behavior and relapse pattern;
- (iii) Identification of unique risk factors and possible cross-addiction leading to behavior presenting imminent danger to public health;
- (iv) Identification of obstacles to behavior change and determination of specific objectives for desired behavior;
- (v) Provision of information about acquisition and transmission of HIV infection;
- (vi) Teaching and training of individual coping skills to prevent relapse to BPID;
- (vii) Specific counseling for chemical dependency, if required;
- (viii) Identification of and assistance with access to community resources, including social services and selfhelp groups appropriate to provide ongoing support and maintenance of behavior change; and
- (ix) Designation of a person primarily responsible for counseling and/or education who:
- (A) Completed pretest and post-test counselor training approved by the office on AIDS; and
- (B) Received training, as approved by the office on AIDS, focused on facilitating behavior change related to preventing BPID; and
- (C) Has a post-graduate degree in social work, psychology, counseling, psychosocial nursing, or other allied profession; and
- (D) Completed at least one year clinical experience after post-graduate education with a primary focus on individualized behavior change; and
- (E) Is a certified counselor under chapter 18.19 RCW.
- (x) Designation and provision of a qualified counselor under WAC 275–19–145 when the detainee is assessed to have a drug or alcohol problem.
- (f) The state board of health designates the following settings appropriate for detainment provided a setting meets requirements in subsection (8)(d)(i), (ii), (iii), (iv), and (v) of this section:
- (i) Homes, care facilities, or treatment institutions operated or contracted by the department;
- (ii) Private homes, as recommended by the local or state health officer;
- (iii) Boarding homes licensed under chapter 18.20 RCW;
- (iv) Nursing homes licensed under chapter 18.51 RCW:
- (v) Facilities licensed under chapter 71.12 RCW, including:
 - (A) Psychiatric hospitals, per chapter 248-22 WAC;
- (B) Alcoholism treatment centers if certified for substance use under chapter 275-19 WAC;
- (C) Adult residential rehabilitation centers, per chapter 248-25 WAC;

- (D) Private adult treatment homes, per chapter 248-25 WAC;
- (E) Residential treatment facilities for psychiatrically impaired children and youth, per chapter 248-23 WAC;
 - (vi) A hospital licensed under chapter 70.41 RCW.
- (9) Jail administrators may order pretest counseling, post-test counseling, and HIV testing of persons detained in jail according to RCW 70.24.360 only under the following conditions:
- (a) The jail administrator documents and reports to the local health officer, within seven days after the incident, any incident perceived to be actual or threatened "behaviors presenting possible risk"; and
 - (b) The local health officer:
- (i) Determines the documented behavior or behaviors meet the criteria established in the definition of "behaviors presenting a possible risk"; and
- (ii) Interviews the detained individual to evaluate the factual basis for alleged actual or threatened behavior;
- (iii) Makes a fact determination, based upon the documented behavior, the interview with the detained individual, and/or independent investigation, that sufficient factual evidence exists to support the allegation of actual or threatened "behaviors presenting possible risk"; and
- (iv) Arranges for testing of the individual who is the source of the behavior to occur within seven days of the request from the jail administrator; and
- (v) Reviews with the detained individual who is the source of the behavior the documentation of the actual or threatened behavior to try to assure understanding of the basis for HIV testing; and
- (vi) Provides written approval of the jail administrator's order prior to HIV testing in accordance with subsection (7)(a)(i) of this section.
- (c) The jail administrator maintains HIV test results and identity of the tested individual as a confidential, nondisclosable record, as provided in RCW 70.24.105.
- (10) When an individual experiences a substantial exposure to another individual's body fluids and requests HIV testing of that other individual, the state and local health officers have authority to order pretest counseling, HIV testing, and post-test counseling of that other individual providing:
- (a) The alleged exposure occurred when the individual was employed or acting as an authorized volunteer in one of the following employment categories:
 - (i) Law enforcement officer;
 - (ii) Firefighter;
 - (iii) Health care provider;
 - (iv) Staff of health care facilities; and
- (b) The alleged substantial exposure occurred on the job; and
- (c) The request to the health officer for testing and counseling of the individual was made within seven days of the occurrence of the alleged exposure; and
 - (d) The local health officer:
- (i) Determines that the alleged exposure meets the criteria established in the definition of "substantial exposure"; and

- (ii) Ensures that pretest counseling of the individual to be tested, or a legal representative, occurs; and
- (iii) Arranges for testing of the individual who is the source of the exposure to occur within seven days of the request from the person exposed; and
- (e) The exposed individual agrees to be tested for HIV if such testing is determined appropriate by the health officer; and
- (f) Records on HIV testing ordered by a health officer are maintained only by the ordering health officer.
- (11) For the purpose of RCW 49.60.172 concerning the absence of HIV infection as a bona fide occupational qualification only, "significant risk" means a job qualification which requires person—to—person contact likely to result in direct introduction of blood into the eye, an open cut or wound, or other interruption of the epidermis, when:
 - (a) No adequate barrier protection is practical; and
- (b) Determined only on case-by-case basis consistent with RCW 49.60.180.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–206, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.24 RCW. 89–07–095 (Order 325), § 248–100–206, filed 3/22/89; 88–21–093 (Order 322), § 248–100–206, filed 10/19/88; 88–17–056 (Order 316), § 248–100–206, filed 8/17/88. Statutory Authority: RCW 43.20.050. 87–11–047 (Order 302), § 248–100–206, filed 5/19/87.]

- WAC 246-100-207 Human immunodeficiency virus (HIV) testing—Ordering—Laboratory screening—Interpretation—Reporting. (1) Any person ordering or prescribing an HIV test for another, except for seroprevalent studies under chapter 70.24 RCW or provided under subsections (2) and (3) of this section, shall:
- (a) Provide or refer for pretest counseling described under WAC 248-100-209;
- (b) Obtain or ensure informed specific consent of the individual to be tested separate from other consents prior to ordering or prescribing an HIV test, unless excepted under provisions in chapter 70.24 RCW; and
- (c) Provide or refer for post-test counseling described under WAC 248-100-209 if HIV test is positive for or suggestive of HIV infection.
- (2) Blood banks, tissue banks, and others collecting or processing blood, sperm, tissues, or organs for transfusion/transplanting shall:
- (a) Obtain or ensure informed specific consent of the individual prior to ordering or prescribing an HIV test, unless excepted under provisions in chapter 70.24 RCW;
- (b) Explain that the reason for HIV testing is to prevent contamination of the blood supply, tissue, or organ bank donations; and
- (c) At the time of notification regarding a positive HIV test, provide or ensure at least one individual counseling session.
- (3) Persons subject to regulation under Title 48 RCW and requesting an insured, subscriber, or potential insured or subscriber to furnish the results of an HIV test for underwriting purposes, as a condition for obtaining or renewing coverage under an insurance contract, health care service contract, or health maintenance organization agreement shall:

- (a) Before drawing blood to perform an HIV test, provide written information to the individual tested explaining:
 - (i) What an HIV test is;
- (ii) Behaviors placing a person at risk for HIV infection;
- (iii) The purpose of HIV testing in this setting is to determine eligibility for coverage;
 - (iv) The potential risks of HIV testing; and
 - (v) Where to obtain HIV pretest counseling.
- (b) Obtain informed specific written consent for an HIV test. The written informed consent shall include:
- (i) An explanation of confidential treatment of test result reports limited to persons involved in handling or determining applications for coverage or claims for the applicant or claimant; and
- (ii) Requirements under subsection (3)(c) of this section.
- (c) Establish procedures to inform an applicant of the following:
- (i) Post-test counseling specified under WAC 248-100-209(4) is required if an HIV test is positive or indeterminate;
- (ii) Post-test counseling is done at the time any positive or indeterminate HIV test result is given to the tested individual;
- (iii) The applicant is required to designate a health care provider or health care agency to whom positive or indeterminate HIV test results are to be provided for interpretation and post-test counseling; and
- (iv) When an individual applicant does not identify a designated health care provider or health care agency and the applicant's HIV test results are positive or indeterminate, the insurer, health care service contractor, or health maintenance organization shall provide the test results to the local health department for interpretation and post-test counseling.
- (4) Laboratories and other places where HIV testing is performed shall demonstrate complete and satisfactory participation in an HIV proficiency testing program approved by the Department Laboratory Quality Assurance Section, Mailstop B17-9, Seattle, Washington 98104.
- (5) The department laboratory quality assurance section shall accept substitutions for EIA screening only as approved by the United States Food and Drug Administration (FDA) and a published list or other written FDA communication.
- (6) Medical laboratories testing for the presence of HIV shall:
- (a) Send an HIV test prevalence results report by telephone or in writing to the department office on AIDS (MS B17-9, Seattle, Washington 98104), quarterly or more often; and
 - (b) Include in the report:
 - (i) Number of samples tested;
- (ii) Number of samples repeatedly reactive by enzyme immuno assay (EIA);
- (iii) Number of samples tested by western blot assay (WBA) or other confirmatory test as approved by department office on AIDS;

- (iv) Number of positive test results by WBA or other confirmatory test as approved by department office on AIDS;
 - (v) Number of specimens tested by viral culture; and
- (vi) Number of positive test results from viral cultures.
- (7) Persons informing a tested individual of positive laboratory test results indicating HIV infection shall do so only when:
 - (a) HIV is isolated by viral culture technique; or
- (b) HIV antibodies are identified by a sequence of tests which are reactive and include:
- (i) A repeatedly reactive screening test such as the enzyme immunoassay (EIA); and
- (ii) An additional, more specific, assay such as a positive western blot assay (WBA) or other tests as defined and described in the AIDS office manual, April, 1988, DSHS, Mailstop LP-20, Olympia, Washington 98504.
- (c) Such information consists of relevant, pertinent facts communicated in such a way that it will be readily understood by the recipient.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–207, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.24 RCW and RCW 70.24.130. 89–20–006 (Order 334), § 248–100–207, filed 9/22/89, effective 10/23/89. Statutory Authority: Chapter 70.24 RCW. 89–14–003 (Order 329), § 248–100–207, filed 6/22/89; 88–17–058 (Order 318), § 248–100–207, filed 8/17/88.]

WAC 246-100-208 Counseling standard--AIDS counseling. (1) Principal health care providers shall counsel or ensure AIDS counseling for:

- (a) Each pregnant woman; and
- (b) Each patient seeking treatment of a sexually transmitted disease.
- (2) Drug treatment programs under chapter 69.54 RCW shall provide or ensure provision of AiDS counseling for each person in a drug treatment program.
- (3) Health care providers, persons, and organizations providing AIDS counseling shall:
- (a) Assess the behaviors of each individual counseled for risk of acquiring and transmitting human immunodeficiency virus (HIV);
- (b) Maintain a nonjudgmental environment during counseling which:
- (i) Considers the individual's particular circumstances; and
- (ii) Is culturally, socially, linguistically, and developmentally appropriate to the individual being counseled.
- (c) Focus counseling on behaviors increasing the risk of HIV acquisition and transmission;
- (d) Provide or ensure provision of personalized risk reduction education to individuals who:
- (i) Are men who had sex with other men at any time since 1977;
- (ii) Used intravenous substances at any time since 1977:
- (iii) Engaged in sex for money or drugs at any time since 1977;
- (iv) Have had sexual and/or injection equipment-sharing contact with persons listed in subsection (3)(d)(i), (ii), and (iii) of this section;

- (v) Have been exposed to or known to have had a sexually transmitted disease at any time since 1977;
- (vi) Are at increased risk of HIV infection by definition of United States Public Health Service, Centers for Disease Control;
- (vii) Are enrolled in a drug treatment program under chapter 69.54 RCW; or
- (viii) Received multiple transfusions of blood, plasma, or blood products from 1977 to 1985.
- (e) Encourage individuals assessed to be at other than virtually no risk of HIV infection to:
 - (i) Receive AIDS risk reduction counseling;
- (ii) Consider information about the nature, purpose, and potential ramifications of HIV testing;
 - (iii) Receive pretest counseling;
- (iv) Consider confidential or anonymous voluntary HIV testing if appropriate; and
- (v) "Virtually no risk of HIV infection" means persons with medical histories absent of and reporting none of the following factors:
- (A) Transfusion with blood or blood products at any time since 1977;
- (B) Residence at any time in countries where HIV is considered endemic since 1977;
- (C) Unprotected sex between men at any time since 1977;
- (D) Use of intravenous substances at any time since 1977, especially when sharing injection equipment;
- (E) Engagement in sex for money or drugs at any time since 1977;
- (F) Sexual and/or injection equipment—sharing contacts at any time since 1977 with persons listed in subsection (3)(e)(iii)(C), (D), and (E) of this section;
 - (G) Exposure to a sexually transmitted disease; and
- (H) Increased risk of HIV infection by definition of United States Public Health Service, Centers for Disease Control.
- (4) Persons and organizations providing AIDS counseling may provide additional or more comprehensive counseling than required in this section.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–208, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.24 RCW. 88–17–058 (Order 318), § 248–100–208, filed 8/17/88.]

WAC 246-100-209 Counseling standards—Human immunodeficiency virus (HIV) pretest counseling—HIV post-test counseling. (1) Health care providers and other persons providing pretest counseling shall:

- (a) Assess the individual's risk of acquiring and transmitting HIV by evaluating information about the individual's possible risk-behaviors;
- (b) Provide at least one individual counseling session prior to HIV testing;
- (c) Inform any individual planning to be tested for HIV that:
- (i) If the test result is positive, the tested individual needs to notify sex and injection equipment—sharing partners that partners:
- (A) May have been exposed to and infected with HIV; and

- (B) Should seek HIV pretest counseling and consider HIV testing; and
- (ii) Unless HIV testing is anonymous, the principal health care provider is required to refer identities of atrisk partners to the local health officer or authorized representative if:
- (A) The HIV-infected individual either refuses or is unable to notify partners of exposure, possible infection, and need for pretest counseling and HIV testing; or
- (B) The HIV-infected individual neither accepts assistance nor agrees to referral to the local health officer or an authorized representative for assistance in notifying partners; and
- (iii) Unless HIV testing is anonymous, the principal health care provider is required to refer the identify of the individual testing positive to the local health officer or an authorized representative if the principal health car provider made efforts, but was unable to meet face—to—face with the individual to:
 - (A) Notify the individual of the HIV test result; and
- (B) Provide post-test counseling, as required in this section, to assure partner notification.
- (2) When an individual is assessed by a counselor or health care provider as "virtually no risk of HIV infection," as defined in WAC 248-100-208 (3)(e)(v) a counselor or the health care provider shall, in addition to subsection (1)(a) of this section:
- (a) Maintain a nonjudgmental environment during counseling which:
- (i) Considers the individual's particular circumstances; and
- (ii) Is culturally, socially, linguistically, and developmentally appropriate to the individual being counseled.
- (b) Explain the nature, purpose, value, and reason for the HIV tests;
- (c) Explain the possible effect of HIV testing and a positive HIV test result related to employment, insurance, housing, and other potential legal, social, and personal consequences;
- (d) Develop and maintain a system of referral and make referrals that:
 - (i) Are accessible and confidential for those counseled;
- (ii) Are acceptable to and supportive of those counseled;
- (iii) Provide assistance to those counseled in maintaining risk reduction behaviors.
- (e) Provide at least one individual counseling session at the time HIV test results are disclosed to individuals testing positive; and
- (f) Maintain disclosure and confidentiality requirements in WAC 248-100-016.
- (3) If the individual is assessed by a health care provider to be other than "virtually no risk of HIV infection," as defined in WAC 248-100-208 (3)(e)(v), the person providing pretest counseling shall maintain requirements in subsection (1) and (2) of this section and:
- (a) Focus counseling on behaviors increasing the risk of HIV acquisition and transmission;
- (b) Provide personalized risk reduction education to individuals who:

- (i) Are men engaging in unprotected intercourse with other men at any time since 1977;
- (ii) Used intravenous substances at any time since 1977, especially those sharing injection equipment;
- (iii) Engaged in sex for money or drugs at any time since 1977;
- (iv) Have had sexual and/or injection equipment—sharing contacts at any time since 1977 with persons listed in subsection (3)(b)(i), (ii), and (iii) of this section:
- (v) Have been exposed to or diagnosed with a sexually transmitted disease;
- (vi) Are at increased risk of HIV infection by definition of United States Public Health Services, Centers for Disease Control;
- (vii) Are required by RCW 70.24.095 and 70.24.340 to receive HIV counseling and testing.
- (c) Inform any individual planning to be tested for HIV of the need to notify sexual and injection equipment—sharing partners if test results are positive;
- (d) Advise individuals listed in subsection (3)(b)(i), (ii), and (iii) of this section not to donate or sell blood, blood products, semen, organs, or other body tissues; and
- (e) Emphasize or reemphasize the following counseling messages:
- (i) The following will eliminate or decrease the risk of HIV infection:
 - (A) Sexual abstinence;
- (B) A mutually monogamous relationship between uninfected people; and
 - (C) Following safer sex guidelines.
- (ii) Do not share intravenous drugs and injection equipment;
- (iii) Do not engage in behaviors in which blood, vaginal fluid, or semen is exchanged;
- (iv) Condoms, even if used properly, do not supply absolute protection from HIV infection;
- (v) Condoms may reduce risk of HIV infection if the condom is:
- (A) Latex and used with a water-based lubricant rather than an oil-based lubricant, if a lubricant is used;
- (B) Used in conjunction with spermicide during vaginal or anal intercourse; and
- (C) Worn from start to finish of vaginal, oral, and anal intercourse.
- (vi) Dental dams may reduce risk of HIV infection if the dental dam is:
 - (A) Latex; and
 - (B) Used from start to finish of oral intercourse.
- (vii) The sexual behaviors having highest risk for HIV infection are those involving the exchange of blood or semen, especially receptive anal and vaginal intercourse;
- (viii) Anal intercourse may increase the risk of condom failure and HIV infection;
- (ix) Infected women should postpone pregnancy until more is known about how to prevent prenatal and perinatal transmission of HIV infection;
- (x) Sexual negotiation skills can be learned to enhance risk reduction; and

- (xi) Other sexually transmitted diseases, especially those causing genital ulcers, may increase the risk of acquiring or transmitting HIV infection.
- (f) Make those counseled aware HIV retesting at a later date may be necessary or recommended.
 - (4) Persons providing post–test counseling shall:
- (a) Follow requirements in subsection (1) of this section:
- (b) Provide at least one individual counseling session at the time HIV test results are disclosed for individuals:
 - (i) Testing positive for HIV; or
- (ii) Reporting practice of behaviors listed in (3)(b)(i), (ii), and (iii) of this section.
- (c) If the individual being counseled tested positive for HIV infection:
- (i) Provide assistance to persons in notifying partners; and/or
- (ii) Offer to refer individuals to the local health officer as necessary for assistance in notifying partners; and/or
- (iii) Offer to refer partners for counseling and testing; and
- (iv) Develop or adopt a system to avoid documenting the names of referred partners in the permanent record of the individual being counseled; and
- (v) Offer referral for alcohol and drug and mental health counseling, including suicide prevention, if appropriate; and
 - (vi) Refer for tuberculosis screening.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-100-209, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.24 RCW. 89-02-008 (Order 324), § 248-100-209, filed 12/27/88; 88-17-058 (Order 318), § 248-100-209, filed 8/17/88.]

WAC 246-100-211 Special diseases--Tuberculosis.

- (1) Health care providers diagnosing or caring for a person with tuberculosis, whether pulmonary or nonpulmonary, shall:
- (a) Report the case to the local health officer or local health department in accordance with the provisions of this chapter, and
- (b) Report patient status to the local health officer every three months or as requested.
- (2) The local health officer or local health department shall:
- (a) Have primary responsibility for control of tuberculosis within the designated jurisdiction;
- (b) Maintain a tuberculosis control program including:
 - (i) Prophylaxis,
 - (ii) Treatment,
 - (iii) Surveillance,
 - (iv) Case finding,
 - (v) Contact tracing, and
 - (vi) Other aspects of epidemiologic investigation;
- (c) Maintain a tuberculosis register of all persons with tuberculosis, whether new or recurrent, within the local jurisdiction including information about:
 - (i) Identification of patient,
 - (ii) Clinical condition,
 - (iii) Epidemiology of disease,

- (iv) Frequency of examinations;
- (d) Impose isolation of a person with tuberculosis in an infectious stage if that person does not observe precautions to prevent the spread of the infection;
 - (e) Designate the place of isolation when imposed;
- (f) Release the person from isolation when appropriate;
- (g) Maintain and provide outpatient tuberculosis diagnostic and treatment services as necessary, including public health nursing services and physician consultation; and
- (h) Submit reports of all cases to the department in accordance with the provisions of this chapter.
- (3) When a person with tuberculosis requires hospitalization,
- (a) Hospital admission shall occur in accordance with procedures arranged by the local health officer and the medical director or administrator of the hospital, and
 - (b) The principal health care provider shall:
- (i) Maintain responsibility for deciding date of discharge, and
- (ii) Notify the local health officer of intended discharge in order to assure appropriate outpatient arrangements.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-100-211, filed 12/27/90, effective 1/31/91; 87-11-047 (Order 302), § 248-100-211, filed 5/19/87.]

WAC 246-100-216 Special diseases—Surveillance for influenza. Local health departments shall:

- (1) Maintain a surveillance system for influenza during the appropriate season which may include:
 - (a) Monitoring of excess school absenteeism,
- (b) Sample check with health care providers, clinics, and hospitals regarding influenza like illnesses,
- (c) Monitoring of work place absenteeism and other mechanisms.
- (2) Encourage submission of appropriate clinical specimens from a sample of patients with influenza-like illness to the Washington state public health laboratory or other laboratory approved by the state health officer.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-100-216, filed 12/27/90, effective 1/31/91; 87-11-047 (Order 302), § 248-100-216, filed 5/19/87.]

WAC 246-100-217 Special condition—Pesticide poisoning. (1) Definitions. For the purposes of this section, the following words and phrases have the following meanings unless the context clearly indicates otherwise:

- (a) "Case of pesticide poisoning" means a person, alive or dead, having been diagnosed as poisoned by any pesticide with the diagnosis based on clinical and/or laboratory evidence.
- (b) "Pesticide" means any pesticide defined in RCW 70.104.020, as now stated and as may be amended in the future.
- (c) "Pesticide applicator" means any person applying pesticides under the authority of the licensing provisions of chapter 15.58 RCW, as a pesticide applicator and/or operator and any person applying pesticides to more than one acre of land in a calendar year.

- (d) "Pesticide poisoning" means the disturbance of function, damage to structure, or illness in humans resulting from the inhalation, absorption, ingestion of, or contact with any pesticide.
- (e) "PIRT" means the pesticide incident reporting and tracking review panel established under the provisions of RCW 70.104.080 with responsibilities as described in RCW 70.104.090.
- (f) "Suspected case of pesticide poisoning" means a case in which the diagnosis is thought more likely than not to be pesticide poisoning.
- (2) Any attending physician or other health care provider recognized as primarily responsible for the diagnosis and treatment of a patient or, in the absence of a primary health care provider, the health care provider initiating diagnostic testing or therapy for a patient shall:
- (a) Notify the department of any case or suspected case of pesticide poisoning, using the toll-free pesticide reporting telephone number (1-800-356-2323), within the following time limits:
 - (i) Immediately, when:
- (A) A hospital admission is due to pesticide poisoning or suspected pesticide poisoning;
- (B) A death is due to pesticide poisoning or suspected pesticide poisoning; or
- (C) A threat to public health, such as multiple cases, is perceived;
- (ii) Within four days for all other cases or suspected cases:
- (b) Within seven days, submit to the department on a department-approved form, an individual case report for each case or suspected case of pesticide poisoning (unless the department of health waives the requirement to submit an individual case report because pertinent information was provided by phone);
- (c) Comply with the same confidentiality requirements established for other reportable diseases or conditions in WAC 248-100-016; and
- (d) Respond to department inquiries regarding reported cases.
- (3) Health care providers notifying the department shall provide:
 - (a) Name of patient;
 - (b) Patient's home and/or mailing address;
 - (c) Patient's home and/or work telephone number;
 - (d) Age;
 - (e) Sex;
 - (f) Race/ethnicity;
 - (g) Diagnosis or suspected diagnosis, including:
 - (i) Name of pesticide, if known;
 - (ii) Date of exposure; and
 - (iii) Date of onset:
- (h) Name, address, and telephone number of the principal health care provider;
- (i) Name, address, and telephone number of the person reporting; and
- (j) Occupation and employer's name and address, if occupational exposure.
 - (4) The department shall:

- (a) Initiate an investigation of each report of a case or suspected case of pesticide poisoning and such cases of suspected pesticide poisoning of animals that may relate to human illness to document the incident within the following time limits:
- (i) Immediately after notification is received from the health care provider of:
- (A) A hospital admission due to pesticide poisoning or suspected pesticide poisoning;
- (B) A death due to pesticide poisoning or suspected pesticide poisoning; or
 - (C) A threat to public health, such as multiple cases;
- (ii) Within forty-eight hours after notification is received for all other cases;
- (b) Supply case report forms to health care providers for purposes of reporting cases or suspected cases of pesticide poisoning;
- (c) Document the known environmental, human, and/ or other variables associated with the case or suspected case of pesticide poisoning;
- (d) Report the results of the pesticide investigation to the principal health care provider named in the case report form and to the local health officer in whose jurisdiction the exposure has occurred;
- (e) Provide a monthly report of cases or suspected cases of pesticide poisoning to the PIRT panel, as required under RCW 70.104.055; and
- (f) Complete case investigations within ninety days unless extenuating circumstances or surveillance needs require a longer investigation time.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–217, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.104 RCW. 90–10–036 (Order 049), § 248–100–217, filed 4/26/90, effective 5/27/90.]

- WAC 246-100-221 Duties of laboratories—Annual registration of laboratories. Every person, firm, or corporation operating or maintaining a medical laboratory shall register annually with the department by completing a form provided by the department and including:
 - (1) Name and address of the laboratory,
- (2) Name of the person or persons owning or operating the laboratory, and
- (3) Other information as indicated on the form provided by the department.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-100-221, filed 12/27/90, effective 1/31/91; 87-11-047 (Order 302), § 248-100-221, filed 5/19/87.]

- WAC 246-100-226 Duties of laboratories—Approval of laboratories to perform prenatal serologic tests for syphilis. (1) Laboratories performing prenatal serologic tests for syphilis shall request approval by the department in accordance with the following:
 - (a) Apply by registering intent with the department,
- (b) provide personnel specifically trained in the serological procedures in use,
- (c) Establish test methods approved by the department based on current recommendations of the United States public health service (USPHS) and consistent with the United States health care financing administration (HCFA) 42 CFR 82.27,

- (d) Perform tests consistent with the manufacturer's recommendations,
- (e) Establish quality control procedures consistent with the manufacturer's recommendations, and
- (f) Maintain records of quality control results and patient's test results for at least two years.
 - (2) Approved laboratories shall:
- (a) Subscribe to a proficiency testing program approved by the department based on recommendations by USPHS and acceptable to United States HCFA,
- (b) Request the testing service to send a report of results to the department,
- (c) Demonstrate satisfactory performance by maintaining a score of seventy percent on each shipment of test samples.
- (3) Written department certification of approval depends upon:
- (a) Satisfactory performance in a proficiency testing program for syphilis serology demonstrated for two consecutive sets of samples, and
- (b) Continuous satisfactory performance in a proficiency testing program for syphilis serology.
 - (4) The department may:
- (a) Perform on-site reviews of laboratories to determine compliance with WAC 248-100-226, and
- (b) Decertify laboratories when conditions described in WAC 248-100-226 are not met.
 - (5) The department shall:
- (a) Provide a list of department-approved laboratories to certified laboratories, local health departments, and others upon request, and
- (b) Decertify any laboratory failing to perform satisfactorily on proficiency testing as described in subsection (2)(c) of this section.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-100-226, filed 12/27/90, effective 1/31/91; 87-11-047 (Order 302), § 248-100-226, filed 5/19/87.]

WAC 246-100-231 Duties of laboratories—Submission of specimens by laboratories. (1) The director of every medical laboratory shall:

- (a) Submit microbiologic cultures, subcultures, or appropriate clinical material as specified in subsection (2) of this section to the Washington state public health laboratory or other laboratory designated by the state health officer for diagnosis, confirmation, or further testing;
- (b) Identify each specimen on a form provided or approved by the department including:
 - (i) The patient's name, and, if available,
- (ii) Age, sex, date of onset of illness, first and last name of principal health care provider.
- (2) When test results indicate possible infection with any of the following, laboratory action shall include:
- (a) Brucellosis (Brucella species): Submit suspicious subcultures for confirmation and final identification;
- (b) Cholera (Vibrio cholerae): Submit subcultures for confirmation and final identification;
- (c) Diphtheria (Corynebacterium diphtheriae): Submit subcultures for identification and for toxin study when indicated;

- (d) Malaria (Plasmodium species): Laboratories are encouraged to submit thick and thin stained smears for conformation, final identification, and forwarding for international epidemiologic surveillance;
- (e) Meningococcal infection of blood or spinal fluid (Neisseria meningitis): Submit subcultures for confirmation and final identification;
- (f) Plague (Yersinia pestis): Submit subcultures or appropriate clinical material for confirmation;
- (g) Salmonellosis, including typhoid fever (Salmonella species): Submit subcultures for confirmation and serotyping;
- (h) Shigellosis (Shigella species): Submit subcultures for confirmation and serotyping;
- (i) Syphilis (Treponema pallidum): Submit reactive or weakly reactive serologic specimens for confirmation and further definitive testing;
- (j) Mycobacteriosis, including tuberculosis (Mycobacterium species): Submit subcultures of initial isolates for:
 - (i) Mycobacterium tuberculosis,
 - (ii) Mycobacterium bovis, and
- (iii) Other mycobacterial species when isolate is suspected of causing disease.
- (k) Tularemia (Francisella tularensis): Submit subcultures or appropriate clinical material for confirmation.
- (3) When clinical impression and epidemiologic circumstances indicate a possible case of botulism, laboratory action shall include the following:
- (a) Infant botulism: Submit stool for clostridium botulinum identification and toxin typing,
 - (b) Food borne botulism:
- (i) Submit serum and stool for C. botulinum identification and toxin typing, and
- (ii) If available, submit suspect foods (ideally in original containers).
- (c) Wound botulism: Submit subculture or serum, debrided tissue, or swab sample from wound for C. botulinum identification.
- (4) The state health officer may require submission of specimens for other infections of public health concern as described in WAC 248-100-041.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–231, filed 12/27/90, effective 1/31/91; 88–07–063 (Order 308), § 248–100–231, filed 3/16/88; 87–11–047 (Order 302), § 248–100–231, filed 5/19/87.]

WAC 246-100-236 Duties of laboratories—Reporting of laboratory results indicative of certain reportable diseases. (1) By December 31, 1987, medical laboratories shall:

- (a) Report each positive culture or other suggestive test results to the local health officer by phone, written report, or submission of specimen within two working days, unless specified otherwise, for:
 - (i) Anthrax (Bacillus anthracis),
 - (ii) Botulism (Clostridium botulinum),
 - (iii) Cholera (Vibrio cholerae),
- (iv) Diphtheria (Corynebacterium diphtheriae) toxigenic strains,

- (v) Gonorrhea (Neisseria gonorrhoeae) (report within seven days),
 - (vi) Measles (rubeola) (measles virus),
 - (vii) Plague (Yersinia pestis),
 - (viii) Rabies (rabies virus),
 - (ix) Brucellosis (Brucella species),
 - (x) Leptospirosis (Leptospira interrogans),
- (xi) Listeria infection of blood or spinal fluid (Listeria monocytogenes),
- (xii) Meningococcal infection of blood or spinal fluid (N. meningitidis),
 - (xiii) Pertussis (Bordetella pertussis),
 - (xiv) Salmonellosis (Salmonella species),
 - (xv) Shigellosis (Shigella species), and
 - (xvi) Hepatitis A (positive anti-HAV IgM).
- (b) Send a copy of the state form accompanying specimen submitted as required in WAC 248-100-231 or identifying information including:
 - (i) Type of specimen tested (e.g., serum or sputum),
 - (ii) Test result,
 - (iii) Name of reporting laboratory,
 - (iv) Date of report,
- (v) Name of requesting health care provider or health care facility, and
 - (vi) Name of patient.
- (2) By December 31, 1987, medical laboratories shall report positive cultures or other suggestive test results for chlamydial infection (chlamydia trachomatis) to local health departments monthly including either:
- (a) Identifying information specified in subsection (1)(b)(i-vi) of this section, or
- (b) Aggregate numbers of positive tests including age, sex, and site of infection when known.
- (3) Medical laboratories shall label or stamp reports appropriately with information indicating "reportable disease" and the telephone number of the local health department, if such labels or stamps are provided by the local health department.
- (4) State and local health officers and health departments receiving reports from medical laboratories shall:
- (a) Allow time for the laboratory to notify the principal health care provider prior to contact if:
 - (i) Delay is unlikely to jeopardize public health, and
 - (ii) The laboratory requests a delay.
- (b) Try to contact the principal health care provider and discuss circumstances prior to contact of a patient when possible.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-100-236, filed 12/27/90, effective 1/31/91; 88-07-063 (Order 308), § 248-100-236, filed 3/16/88; 87-11-047 (Order 302), § 248-100-236, filed 5/19/87.]

WAC 246-100-241 Duties of laboratories-Duty to cooperate with local health departments and the department. (1) Medical laboratories shall:

(a) Cooperate with local health departments and the department in the investigation of an outbreak, suspected outbreak, case, suspected case, carrier, or contact of a communicable disease or reportable disease or condition, and

- (b) Provide, in a timely manner, any information related to the laboratory features of the investigation when requested by the local or state health officer.
- (2) A laboratory director may designate responsibility for working and cooperating with public health personnel to certain laboratory employees as long as designated employees are:
 - (a) Readily available, and
- (b) Able to provide requested information in a timely manner.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–100–241, filed 12/27/90, effective 1/31/91; 87–11–047 (Order 302), § 248–100–241, filed 5/19/87.]

Chapter 246-110 WAC CONTAGIOUS DISEASE--SCHOOL DISTRICTS AND DAY CARE CENTERS

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246-110-001 Purpose.

246-110-010 Definition.

246-110-020 Control of communicable (contagious) disease.

WAC 246-110-001 Purpose. The following regulations are adopted by the board of health for the purpose of governing the presence on or about any school or day care center premises of susceptible persons who have, or have been exposed to, a communicable disease. These regulations are in addition to other requirements imposed by chapter 248-100 WAC.

In furtherance of the purpose and intent of the law and these regulations, it is recommended that parents of students whose medical supervision seems inadequate should be encouraged to obtain the services of a physician for the child. When the economic situation warrants, the parents should be guided to the appropriate source of community—sponsored medical care. These regulations are not intended to imply that any diagnosis or treatment will be performed by school or day care center personnel.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–110–001, filed 12/27/90, effective 1/31/91; 90–21–056 (Order 095), § 248–101–011, filed 10/15/90, effective 10/15/90.]

WAC 246-110-010 Definition. As used in this portion of these regulations, these terms shall mean:

- (1) "Contact" means a person exposed to an infected person, animal, or contaminated environment which might provide an opportunity to acquire the infection.
- (2) "Exposure" means such association with a person or animal in the infectious stage of a disease, or with a contaminated environment, as to provide the opportunity to acquire the infection.
- (3) "Susceptible" means a person who does not possess sufficient resistance, whether natural or induced, to a pathogenic agent or disease to prevent contracting that disease when exposed thereto.
- (4) "Communicable disease (contagious disease)" means an illness caused by an infectious agent which can

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be transmitted from one person, animal, or object to another person by direct or indirect means including transmission via an intermediate host or vector, food, water, or air. Communicable (contagious) diseases include, but are not limited to:

- (a) Chickenpox
- (b) Conjunctivitis (bacterial)
- (c) Diphtheria
- (d) Giardiasis
- (e) Hepatitis A
- (f) Invasive Haemophilus influenza disease (excluding otitis media)
 - (g) Measles
 - (h) Meningitis (bacterial)
 - (i) Mumps
 - (j) Pediculosis
 - (k) Pertussis
 - (l) Rubella
 - (m) Salmonellosis
 - (n) Shigellosis
 - (o) Tuberculosis
- (5) "School" means each building, facility, and location at or within which any or all portions of a preschool, kindergarten and grades one through twelve program of education and related activities are conducted for two or more children by or in behalf of any public school district and by or in behalf of any private school or private institution subject to approval by the state board of education.
- (6) "Day care center" means an agency which regularly provides care for a group of children for periods of less than twenty—four hours and is licensed pursuant to chapter 74.15 RCW.
- (7) "Outbreak" means the occurrence of cases of a disease or condition in any area over a given period of time in excess of the expected number of cases.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–110–010, filed 12/27/90, effective 1/31/91; 90–21–056 (Order 095), § 248–101–021, filed 10/15/90, effective 10/15/90.]

- WAC 246-110-020 Control of communicable (contagious) disease. (1) When there is an outbreak of a contagious disease, as defined in 248-101-021, such that there is the potential for a case or cases within a school or day care center, the local health officer, if appropriate, after consultation with the secretary of health or designee shall take all medically appropriate actions deemed to be necessary to control or eliminate the spread of the disease, including, but not limited to:
- (a) Closing the affected school(s) or day care center(s), or part(s) thereof;
- (b) Closing other schools or day care centers in the local health officer's jurisdiction;
- (c) Causing the cessation of selected school or day care center activities or functions;
- (d) Excluding from schools or day care centers in the local health officer's jurisdiction any students, staff, and volunteers who are infected with, or deemed to be susceptible to, the disease.
 - (2) Prior to taking action the health officer shall:

- (a) Consult with and discuss the ramifications of action with the superintendent of the school district, or the chief administrator of the day care center or their designees on the proposed action; and
- (b) Provide the board of directors and the superintendent of the school district or the chief administrator of the day care center a written decision in the form and substance of an order directing them to take action;
- (3) Where these actions have been taken, the local health officer shall, in addition:
- (a) Set the terms and conditions permitting schools or day care centers to reopen; activities and functions to resume; and excluded students, staff and volunteers to be readmitted; and
- (b) Pursue, in consultation with the secretary of health or designee and school and/or day care officials, the investigation of the source of disease, or order those actions necessary to the ultimate control of the disease.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–110–020, filed 12/27/90, effective 1/31/91; 90–21–056 (Order 095), § 248–101–221, filed 10/15/90, effective 10/15/90.]

Chapter 246–130 WAC HUMAN IMMUNODEFICIENCY VIRUS (HIV) INFECTION TREATMENT

246-130-001	Purpose.
246-130-010	Definitions.
246-130-020	Services.
246-130-030	Reimbursements.
246-130-040	Financial eligibility.
246-130-050	Transfer of resources without adequate consideration
246-130-060	Fiscal information.
246-130-070	Patient participation.

WAC 246-130-001 Purpose. The department shall administer federal and state funds appropriated to assist a person in need of Zidovudine, or other drugs and treatments available in the future. These drugs are used for the treatment of various stages of infection with HIV.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-130-001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 43.70.120. 90-17-087 (Order 071), § 248-168-010, filed 8/17/90, effective 9/17/90. Statutory Authority: RCW 43.20A.550. 87-22-012 (Order 2549), § 248-168-010, filed 10/26/87.]

- WAC 246-130-010 Definitions. The following words and phrases have the following meaning in chapter 248-168 WAC unless the context clearly indicates otherwise:
- (1) "AIDS" means acquired immunodeficiency syndrome.
 - (2) "APDP" means AIDS prescription drug program.
- (3) "Department" or "DOH" means the Washington state department of health.
 - (4) "HIV" means human immunodeficiency virus.
- (5) "NPIG" means National Poverty Income Guidelines as under sections 652 and 673 (2) of the Omnibus Budget Reconciliation Act of 1981 (Public Law 9735)

and as updated annually in the Federal Register on February 16.

(6) "Patient share" means the amount of cost borne by the patient.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-130-010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 43.70.120. 90-17-087 (Order 071), § 248-168-015, filed 8/17/90, effective 9/17/90.]

WAC 246-130-020 Services. To the extent federal or state funds are appropriated for the purpose of APDP approved drugs and treatments, the department shall reimburse a participating pharmacy, or health care provider, and clinic for costs of dispensing APDP approved drugs and treatments to an eligible individual suffering from infection with HIV.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-130-020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 43.70.120. 90-17-087 (Order 071), § 248-168-020, filed 8/17/90, effective 9/17/90. Statutory Authority: RCW 43.20A.550. 87-22-012 (Order 2549), § 248-168-020, filed 10/26/87.]

WAC 246-130-030 Reimbursements. Individuals desiring reimbursement for APDP approved drugs and treatments must provide evidence of financial eligibility as established by WAC 248-168-040. The department will make reimbursement, reduced by the patient share computed in accordance with WAC 248-168-070, to eligible participants who, in the department's judgment, demonstrate the greatest need or the most likely benefit from the treatments.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–130–030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 43.70.120. 90–17–087 (Order 071), § 248–168–030, filed 8/17/90, effective 9/17/90. Statutory Authority: RCW 43.20A.550. 87–22–012 (Order 2549), § 248–168–030, filed 10/26/87.]

WAC 246-130-040 Financial eligibility. (1) The department will consider a patient eligible if he or she:

- (a) Has resources at or below the exemptions listed under subsection (3) of this section; and
- (b) Is not eligible for any other resources providing similar benefits to meet the costs of the treatment; and
- (c) Has gross monthly income at or below three hundred seventy percent of the NPIG; and
- (d) The total cost of program covered medications is in excess of the patient's share as computed in accordance with WAC 248-168-070.
- (2) The department shall consider the following in determining resources:
 - (a) Savings, property, and other assets;
- (b) Government and private medical insurance programs, including Medicaid, providing partial or full coverage for drug and treatments needed in the treatment of infection with HIV; and
- (c) Local funds raised for the purpose of providing financial support for a specified patient.
- (3) The following exemptions shall not be considered in determining a patient's resources to pay for treatments covered by these regulations:
- (a) A home, defined as real property owned by a patient as a principal place of residence, together with the

property surrounding and contiguous thereto not to exceed five acres; and

- (b) Commercial property, or property used for the purpose of producing income, except to the extent that its value exceeds the sum of ten thousand dollars;
 - (c) Household furnishings;
 - (d) An automobile; and
- (e) Savings, property, or other liquid assets, to the extent the value thereof does not exceed the sum of ten thousand dollars.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–130–040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 43.70.120. 90–17–087 (Order 071), § 248–168–040, filed 8/17/90, effective 9/17/90. Statutory Authority: RCW 43.20A.550. 87–22–012 (Order 2549), § 248–168–040, filed 10/26/87.]

WAC 246-130-050 Transfer of resources without adequate consideration. The department shall:

- (1) Consider an individual ineligible for the program if the person knowingly and willfully assigns or transfers nonexempt resources at less than fair market value for the purpose of qualifying or continuing to qualify for the program within two years preceding the date of application.
- (2) Require expiration of two years before the individual will be considered eligible between the date of transfer and reapplication.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-130-050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 43.70.120. 90-17-087 (Order 071), § 248-168-050, filed 8/17/90, effective 9/17/90. Statutory Authority: RCW 43.20A.550. 87-22-012 (Order 2549), § 248-168-050, filed 10/26/87.]

WAC 246-130-060 Fiscal information. An individual seeking coverage shall provide fiscal information upon request of the department including:

- (1) Sources and amounts of resources to verify financial eligibility,
- (2) Evidence all other available resources were used before requests for reimbursement from the state program are submitted to the department, and
- (3) Other information when required by the department.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-130-060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 43.70.120. 90-17-087 (Order 071), § 248-168-060, filed 8/17/90, effective 9/17/90. Statutory Authority: RCW 43.20A.550. 87-22-012 (Order 2549), § 248-168-060, filed 10/26/87.]

WAC 246-130-070 Patient participation. The patient shall be responsible for paying part of the cost of the treatment received in any month in which his or her income exceeds two hundred percent of the NPIG. The amount of the patient's share shall be one-sixth of the amount by which his or her income for the month exceeds two hundred percent of the NPIG.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–130–070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 43.70.120. 90–17–087 (Order 071), § 248–168–070, filed 8/17/90, effective 9/17/90.]

Chapter 246-132 WAC CLASS IV HIV HEALTH INSURANCE ELIGIBILITY

WAC

246-132-020 Class IV human immunodeficiency virus (HIV) insurance program.

246-132-030 Eligibility.

WAC 246-132-020 Class IV human immunodeficiency virus (HIV) insurance program. Definitions of program covered by the department of health.

- (1) "Class IV HIV insurance program" means the program authorized by chapter 70.24 RCW and financed by state funds to assure health insurance coverage for an individual with Class IV HIV infection as defined by the state board of health meeting eligibility requirements established by the department.
- (2) "Class IV HIV infection" means an illness characterized by the diseases and conditions defined and described by the state board of health in WAC 248-100-011(1) and 248-100-076 (1)(c)(i).

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-132-020, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.24 RCW and 1989 c 260 § 3. 90-03-052 (Order 020), § 248–180–010, filed 1/16/90, effective 2/16/90.]

WAC 246-132-030 Eligibility. (1) The department shall pay, to the extent a person is liable for group health insurance premiums, such premiums for a person who has a diagnosis of Class IV human immunodeficiency virus (HIV) infection and:

- (a) Is terminated from employment for reasons other than gross misconduct;
- (b) Has experienced a reduction in employment hours to the extent the applicant is liable for part or all of the health insurance premium;
- (c) Is entitled to benefits under Title XVIII of the Social Security Act:
- (d) Ceases to be a dependent child under the requirements of the health insurance plan; or
- (e) Is divorced or legally separated from the covered employee and has continuation coverage rights.
- (2) An applicant's eligibility under the program shall cease when the individual:
 - (a) Dies;
- (b) Loses insurance eligibility for a reason other than the reasons noted under subsection (1) of this section; or
 - (c) Moves out of state.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-132-030, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.24 RCW and 1989 c 260 § 3. 90-03-052 (Order 020), § 248–180–020, filed 1/16/90, effective 2/16/90.]

Chapter 246-170 WAC TUBERCULOSIS--CONTROL, PREVENTION, AND TREATMENT

WAC 246-170-001 Purpose. 246-170-010 Definitions.

246-170-020 Responsibility of local health officers. 246-170-030 Local health department responsibilities. 246-170-040 Inpatient services. 246-170-050 Infection control. 246-170-060 Clinical services. 246-170-070 Home treatment. 246-170-080 Case monitoring. 246-170-090 Program review.

WAC 246-170-001 Purpose. (1) These regulations are adopted for the purpose of establishing standards necessary to assure the effective and adequate care and treatment of persons suffering from tuberculosis in hospitals, nursing homes, and other organized living groups, or outpatient settings, including patient homes.

- (2) Outpatient treatment should be given the highest priority in personnel and services. A high degree of success must be achieved, requiring the dedicated service of physicians and nurses who can identify with every type of patient and a provision of a full range of type of service, including office, clinic, home visit and special clinics.
- (3) These regulations are adopted pursuant to section 2, chapter 213, Laws of 1973 1st ex. sess., and RCW 70.33.020, and the requirements of these regulations shall be in addition to the requirements of WAC 248-100-532, now or as hereafter amended.

[Statutory Authority: RCW 43,70.040, 91-02-049 (Order 121), recodified as § 246-170-001, filed 12/27/90, effective 1/31/91; Order 848, § 248–99–010, filed 8/23/73.]

WAC 246-170-010 Definitions. (1) "Primary physician" shall mean the physician who assumes the dayto-day medical care of a tuberculosis patient.

- (2) "Chest clinic" shall mean an outpatient medical activity provided for persons suffering from or suspected to be suffering from disease primarily affecting the lungs.
- (3) "Inpatient" shall mean medical care furnished in a hospital, nursing home or other organized living group in which the patient is a resident.
- (4) "Outpatient" shall mean medical care furnished to patients who are residents in their homes or other places of residence.
- (5) "Surveillance" shall mean an organized system of medical observation of persons at risk of developing active disease.
- (6) "Suspect" shall mean a person who may possibly have a disease condition.
- (7) "Epidemiological investigation" shall mean those specific actions taken by physicians or nurses which are taken to determine the extent of spread of infection from an active case of tuberculosis.
- (8) "Register" shall mean the listing of all tuberculosis patients as required by WAC 248-100-532 (3)(c), now or as hereafter amended.
- (9) "UV generator" shall mean a properly mounted fluorescent tube which electrically produces ultraviolet radiation with bacteriocidal properties.
- (10) "Slide microscopy" shall mean the diagnostic test in which body fluids such as sputum are examined for the presence of pathogenic bacteria.

- (11) "Prophylaxis" shall mean either primary treatment to prevent infection in an uninfected person or secondary treatment to treat disease in an infected person.
- (12) "Infectious" shall mean the state of being the possible transmitter of tuberculosis infection to other persons.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-170-010, filed 12/27/90, effective 1/31/91; Order 848, § 248-99-020, filed 8/23/73.]

WAC 246-170-020 Responsibility of local health officers. County, city-county and district health officers are responsible for the control of tuberculosis within their jurisdictions. Each health officer will act as or will designate another physician to act as a tuberculosis control officer. This individual will coordinate all aspects of the control and treatment program.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-170-020, filed 12/27/90, effective 1/31/91; Order 848, § 248-99-030, filed 8/23/73.]

- WAC 246-170-030 Local health department responsibilities. (1) Each health department shall staff and provide a chest clinic under the supervision of a physician specializing in pulmonary diseases. Sufficient nursing and clerical personnel shall be provided to furnish supervision of post-inpatient treatment, post-treatment surveillance, suspect evaluation, epidemiological investigation, contact workup and prophylaxis. A health department unable to provide these services shall contract for such services.
- (2) A register must be kept of all known cases of tuberculosis within the jurisdiction in accordance with WAC 248-100-532 (3)(c), now or as hereafter amended. Reports of all newly discovered cases of tuberculosis must be made promptly to the department of social and health services.
- (3) One or more physicians qualified to treat tuberculosis as determined by the local health officer with the advice of the state tuberculosis advisory committee shall be secured to assume the primary inpatient and/or outpatient care of patients. A tuberculosis clinical consultant, similarly endorsed, shall be available to provide review in case conferences of diagnoses, plans of management and dates of discharge.
- (4) The health department shall also provide by contract appropriate inpatient care. Public health nursing services sufficient to meet the needs of outpatients including home care programs shall be available. Social service is necessary, and if not available within the department, shall be arranged.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-170-030, filed 12/27/90, effective 1/31/91; Order 848, § 248-99-040, filed 8/23/73.]

WAC 246-170-040 Inpatient services. (1) Hospitals which treat infectious tuberculosis patients shall provide the following: Private or semiprivate rooms suitably arranged for respiratory isolation with a properly installed UV generator, nursing service, complete x-ray service, respiratory therapy service, clinical laboratory services including slide microscopy, occupational therapy when

reasonably available to the hospital, patient education, and social services.

(2) Nursing homes caring for infectious tuberculosis patients shall provide the following: A private or semiprivate room arranged for respiratory isolation, and nursing service.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–170–040, filed 12/27/90, effective 1/31/91; Order 848, § 248–99–050, filed 8/23/73.]

- WAC 246-170-050 Infection control. (1) A hospital which contracts to treat tuberculosis patients shall have an infection control committee, published infection control policies for nursing and laboratory services, a staff health surveillance program including skin testing and periodic x-ray examination, and continuing staff education. Mycobacteriological culture, identification and sensitivity testing are procedures not recommended for hospital laboratories; these services are available in the state public health laboratory.
- (2) Nursing homes caring for tuberculosis patients shall continuing staff education, published infection control policies, and a staff health surveillance program.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-170-050, filed 12/27/90, effective 1/31/91; Order 848, § 248-99-060, filed 8/23/73.]

- WAC 246-170-060 Clinical services. (1) The following physician services shall be available for the treatment of tuberculosis patients in all hospitals treating tuberculosis patients and as appropriate in nursing homes: Internal medicine and pediatrics (primary physician), pulmonary disease (consultant), available consultation in other appropriate medical and surgical specialties, chest surgery, pathology, mycobacteriology (state laboratory).
- (2) Case conferences shall be held regularly involving the primary physician, consultant and health officer to ensure accurate diagnosis, effective treatment regimen and discharge at the earliest date consistent with good management and safety from transmission. Discharge conferences must include a representative of the facility which will be supervising treatment after discharge.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-170-060, filed 12/27/90, effective 1/31/91; Order 848, § 248-99-070, filed 8/23/73.]

WAC 246-170-070 Home treatment. When the home situation and clinical state are favorable, cooperative patients may be treated on an outpatient basis. Case conference between primary physician, health officer and consultant is required as in hospital practice.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-170-070, filed 12/27/90, effective 1/31/91; Order 848, § 248-99-080, filed 8/23/73.]

WAC 246-170-080 Case monitoring. From the time of diagnosis every patient shall be monitored by the local health department for the purpose of assuring that treatment is continuous, appropriately reviewed and completed. The case register shall be kept in sufficient detail to allow recording of accomplishment of periodic

diagnostic studies, clinical progress and changes in state of disease. Quarterly status reports on each diseased patient will be furnished to the department of social and health services tuberculosis control program. Business and financial records including contracts and accounts shall be maintained by an administrative clerk.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–170–080, filed 12/27/90, effective 1/31/91; Order 138, § 248–99–090, filed 2/7/77; Order 848, § 248–99–090, filed 8/23/73.]

WAC 246-170-090 Program review. To ensure effective, economical control programs health departments shall maintain adequate operational records and carry out a comprehensive program review annually. Important program criteria are: Proportion of patients brought to completion of treatment, proportion of newly discovered cases which are reactivations, proportion of completed epidemiological investigation of newly discovered cases, prompt evaluation of close contacts of new cases, evaluation of other significant contacts within a prescribed period, and proportion of close contacts placed on prophylaxis. Recommended values for these criteria will be published annually by the department of social and health services.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-170-090, filed 12/27/90, effective 1/31/91; Order 848, § 248-99-100, filed 8/23/73.]

Chapter 246–171 WAC TUBERCULOSIS--FINANCIAL RESPONSIBILITY

WAC	
246-171-010	Definitions.
246-171-020	Statement of financial resources.
246-171-030	Statement of financial resources-Cooperation in ob-
	taining information.
246-171-040	Statement of financial resources—Emergencies.
246-171-050	Financial ability—Determination.
246-171-060	Financial ability-Forms.
246-171-070	Financial ability—Review of financial ability.
246-171-080	Financial ability—Standards generally.
246-171-090	Financial ability—Inability to pay.
246-171-100	Financial ability—Specific minimum standards.
246-171-110	Payment by patient.
246-171-120	Liability of estate.
246-171-130	Statement of costs.
246-171-140	Payment by county.

- WAC 246-171-010 Definitions. (1) "Tuberculosis facility" shall mean any hospital, sanatorium or other facility maintained by a county for the in-patient care of persons suffering from infection or suspected infection with Mycobacterium tuberculosis.
- (2) "Local health department" shall mean the health department which provides public health services for tuberculosis control to persons within the jurisdictional area.
- (3) "Local health officer" shall mean the legally qualified physician who has been appointed as the health officer for the city, town, county or district health department or his appointed tuberculosis control officer.
- (4) "Department" shall mean the Washington state department of health.

- (5) "Medical director" shall mean the director of the tuberculosis facility.
- (6) "Responsible person" shall mean those responsible for the support of a patient in the following order:
 - (a) The spouse of the patient.
 - (b) The parents of a minor patient.
- (c) The children of the patient where they have assumed the responsibility for the support of the patient.
- (d) The guardian or legal representative of the patient.
- (7) "Cost of care" of a hospitalized tuberculosis patient is all reasonable cost of services as computed by procedures and methods for determining reasonable cost necessary under provisions of the Health Insurance for the Aged Act of 1965 as amended.
- (8) "Current income" shall be that monthly cash which the patient or his family earns during the time of hospitalization through wages, profits from business, dividends, interest, sick pay and benefits derived from health and accident insurance collectible as a result of illness and confinement in the tuberculosis facility. Funds derived from the liquidation of capital assets or withdrawal from savings may be used to supplement current income to the extent that such assets and savings exceed the exempt amount as specified in these regulations.
- (9) "Admission" shall mean the entry of a patient into a tuberculosis facility and the completion of all necessary admission records to include financial data.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-171-010, filed 12/27/90, effective 1/31/91; Order 31, § 248-118-010, filed 8/18/69.]

WAC 246-171-020 Statement of financial resources. Prior to admission as a patient to a tuberculosis facility, every patient, or the person responsible under the laws of the state of Washington for his support, shall provide the local health officer of the county of his residence a statement of his financial resources, holdings and obligations upon forms provided by the department. Said forms shall be in duplicate, one copy to be furnished to the tuberculosis facility, and one copy to be furnished to the local health officer: Provided, That no individual need provide any health official or tuberculosis facility a statement of his financial resources, holdings or obligations if he agrees to pay, and subsequently does pay that portion of the cost of hospitalization remaining after deducting all costs legitimately due from medical or hospital or health insurance, medicare, or other similar legitimate applicable prepaid health care or insurance type resources: Provided further, That such individual is free to leave said tuberculosis facility at any time at his own discretion, with or without a medical discharge, but in no such instance will the hospital or sanatorium, nor physician nor nurse, be liable for any damages accruing from his ill health due to tuberculosis or complications thereof: Provided further, That an individual whose sputum, gastric contents or other bodily discharges are demonstrated to contain pathogenic Mycobacterium organisms, and who because of this is quarantined to protect others from the disease, shall not be liable for the cost of such hospitalization beyond that received from medical or health or hospital insurance, medicare or similar legitimate, applicable prepaid health care or insurance resources.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-171-020, filed 12/27/90, effective 1/31/91; Order 31, § 248-118-020, filed 8/18/69.]

WAC 246-171-030 Statement of financial resources—Cooperation in obtaining information. Local health officers may have the assistance of the director of the tuberculosis facility, when necessary, in obtaining a statement of the patient's financial resources, holdings and obligations.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-171-030, filed 12/27/90, effective 1/31/91; Order 31, § 248-118-021, filed 8/18/69.]

WAC 246-171-040 Statement of financial resources—Emergencies. If a patient must be admitted to the tuberculosis facility at night or on a holiday or weekend or as an emergency the statement shall be obtained as soon as practicable following admission.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-171-040, filed 12/27/90, effective 1/31/91; Order 31, § 248-118-022, filed 8/18/69.]

WAC 246-171-050 Financial ability—Determination. Upon the filing of a financial statement as provided for under WAC 248-118-020 through 248-118-022, it shall be the duty of the local health officer to determine the financial ability of such patient, or the person responsible therefor, to contribute in whole or in part to the cost of care in such facility.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-171-050, filed 12/27/90, effective 1/31/91; Order 31, § 248-118-030, filed 8/18/69.]

WAC 246-171-060 Financial ability—Forms. In determining the financial responsibility of a patient, or the responsible person, it shall be the duty of the local health officer to complete the forms provided by the department. Said forms shall be made in triplicate, one copy to be furnished to the tuberculosis facility, one copy to be furnished to the department, and one to be retained by the local health officer.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-171-060, filed 12/27/90, effective 1/31/91; Order 31, § 248-118-040, filed 8/18/69.]

WAC 246-171-070 Financial ability—Review of financial ability. The determination of financial ability to pay shall be reviewed at the patient's request or in the event that information of a substantial change in the patient's or responsible person's ability to pay should come to the attention of the health officer.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-171-070, filed 12/27/90, effective 1/31/91; Order 31, § 248-118-050, filed 8/18/69.]

WAC 246-171-080 Financial ability-Standards generally. The patient or responsible person shall be

charged that portion of the cost of care which he can pay from any and all sources of current income and capital available to him which is deemed to be in excess of his requirements to maintain the family standard of living at a level equal to that which existed prior to the patient's entry into the tuberculosis facility. In all cases, health insurance benefits accruing to the patient as a result of his hospitalization for tuberculosis shall be considered to be income in excess of that needed to maintain the family standard of living.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-171-080, filed 12/27/90, effective 1/31/91; Order 31, § 248-118-060, filed 8/18/69.]

WAC 246-171-090 Financial ability-Inability to pay. If a patient or the responsible person is, in whole or in part, provided support by the Washington state department of public assistance, he shall be considered unable to pay any part of the cost of care.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-171-090, filed 12/27/90, effective 1/31/91; Order 31, § 248-118-061, filed 8/18/69.]

WAC 246-171-100 Financial ability—Specific minimum standards. A patient, or the person responsible therefor, shall not be required to contribute to the cost of his hospital care to the extent that such contribution would require any of the following steps:

- (1) Lowering of normal living expenditures from their level prior to hospitalization.
- (2) Endangering the title to a home, furnishings, or automobile.
- (3) Employment of any dependent not employed prior to the beginning of the patient's hospitalization.
- (4) Depletion of hospitalization insurance benefits available to dependents.
- (5) Depletion of real property holdings; or depletion of cash savings or securities below the value at which such assets would yield, at five percent per annum, a prescribed percentage of the current total annual living expense. The total annual living expense shall be figured at twelve times the monthly total family needs as determined on the forms provided by the department. The percentage shall be prescribed as follows: One hundred percent if either the patient or the responsible person is sixty years of age or older; sixty percent if the patient or responsible person is at least fifty but not more than fifty—nine years; thirty percent if he is at least forty but not more than forty—nine years; and ten percent if he is less than forty years of age.
- (6) Reducing the patient's assets below the amount that would be allowed as an award in lieu of homestead pursuant to RCW 11.52.010.
- (7) Shortening of hospital stay to less than that necessary for adequate treatment.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-171-100, filed 12/27/90, effective 1/31/91; Order 31, § 248-118-070, filed 8/18/69.]

WAC 246-171-110 Payment by patient. The patient, or the responsible person shall, upon a determination by the local health officer that he is capable of

contributing to the cost of his hospitalization, pay to the sanatorium the amount determined by the local health officer who shall be informed of the payment on a monthly basis.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-171-110, filed 12/27/90, effective 1/31/91; Order 31, § 248-118-080, filed 8/18/69.]

WAC 246-171-120 Liability of estate. The unpaid portion of any patient's share of charges for hospitalization shall be a liability of the estate which, while there is a surviving spouse, shall be considered as capital assets of the responsible person and subject to depletion according to WAC 248-118-070(5).

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-171-120, filed 12/27/90, effective 1/31/91; Order 31, § 248-118-090, filed 8/18/69.]

WAC 246-171-130 Statement of costs. A statement of the cost of care shall be prepared by the director of the tuberculosis facility monthly and at the time of discharge. Each statement shall show the amount charged to the patient, or responsible person, to a responsible insurance carrier or fiscal intermediary and to the county in which the patient resided prior to his hospitalization.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-171-130, filed 12/27/90, effective 1/31/91; Order 31, § 248-118-100, filed 8/18/69.]

WAC 246-171-140 Payment by county. The local health officer shall be responsible for payment of tuberculosis hospital expenses from county funds monthly in amounts sufficient to pay that portion of the cost of care which has not been paid by the patient or responsible person, his medical insurance carrier or fiscal intermediary. Payments received from the patient, responsible person or insurance carrier after costs have been paid from county funds shall be credited to the county's account

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-171-140, filed 12/27/90, effective 1/31/91; Order 31, § 248-118-110, filed 8/18/69.]

Chapter 246-201 WAC BASIC PLUMBING PRINCIPLES

WAC 246-201-001 Purpose and nature of regulations. 246-201-020 Water supply requirements. 246-201-030 Volume of flow. 246-201-040 Size of pipes. 246-201-050 Boilers and hot water tanks. 246-201-060 Sewage connection. 246-201-070 Water closets—Multiple dwellings. 246-201-080 Plumbing fixtures. 246-201-090 Drainage systems. 246-201-100 Drainage pipes. 246-201-110 Cleanouts. 246-201-120 Traps. 246-201-130 Pipes—Adequate air circulation. 246-201-140 Soil stacks. 246-201-150 Water and air pressure tests. 246-201-160 Clogging substances. 246-201-170 Food receptacles and the drainage system.

WAC 246-201-001 Purpose and nature of regulations. These regulations embody the fundamental sanitary principles which a successful plumbing system should satisfy. These principles have been prepared with the view of specifying the results desired, and of making provision for testing the plumbing work to ascertain whether satisfactory results can be secured, but they do not attempt to specify details of construction.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-201-001, filed 12/27/90, effective 1/31/91; Regulation .94.001, effective 3/11/60.]

WAC 246-201-020 Water supply requirements. All premises intended for human habitation or occupancy should be provided with a water supply which meets the requirements of the Washington state department of health.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-201-020, filed 12/27/90, effective 1/31/91; Regulation .94.010, effective 3/11/60.]

WAC 246-201-030 Volume of flow. Buildings in which water closets and other plumbing fixtures exist should be provided with a supply of water adequate in volume and pressure for flushing purposes.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–201–030, filed 12/27/90, effective 1/31/91; Regulation .94.020, effective 3/11/60.]

WAC 246-201-040 Size of pipes. The pipes conveying water to water closets should be of sufficient size to supply the water at a rate which will flush the toilets adequately without unduly reducing the pressure at other fixtures.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-201-040, filed 12/27/90, effective 1/31/91; Regulation .94.030, effective 3/11/60.]

WAC 246-201-050 Boilers and hot water tanks. Devices for heating water and storing it in "boilers" or hot water tanks, should be so designed and installed as to prevent all dangers from explosion and also to prevent a back flow of hot water through meters connected with the public water supply.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-201-050, filed 12/27/90, effective 1/31/91; Regulation .94.040, effective 3/11/60.]

WAC 246-201-060 Sewage connection. Every building intended for human habitation or occupancy on premises abutting on a street in which there is a public sewer should have a connection with the sewer and, if possible, a separate connection.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-201-060, filed 12/27/90, effective 1/31/91; Regulation .94.050, effective 3/11/60.]

WAC 246-201-070 Water closets—Multiple dwellings. In multiple dwellings provided with a building drainage system there should be at least one private water closet for each family.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-201-070, filed 12/27/90, effective 1/31/91; Regulation .94.060, effective 3/11/60.]

WAC 246-201-080 Plumbing fixtures. Plumbing fixtures should be made of smooth, nonabsorbent materials, should be free from concealed fouling surfaces and should be set free of enclosures.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-201-080, filed 12/27/90, effective 1/31/91; Regulation .94.070, effective 3/11/60.]

WAC 246-201-090 Drainage systems. The entire building drainage system should be so designed, constructed, and maintained as to conduct the waste water or sewage quickly from the fixture to the place of disposal with velocities which will guard against fouling and the deposit of solids and will prevent clogging.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-201-090, filed 12/27/90, effective 1/31/91; Regulation .94.080, effective 3/11/60.]

WAC 246-201-100 Drainage pipes. The drainage pipes should be so designed and constructed as to be proof for a reasonable life of the building against leakage of water or drain air due to defective materials, imperfect connections, corrosion, settlements or vibrations of the ground or building, temperature changes, freezing, or other causes.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-201-100, filed 12/27/90, effective 1/31/91; Regulation .94.090, effective 3/11/60.]

WAC 246-201-110 Cleanouts. The drainage system should be provided with an adequate number of cleanouts so arranged that in case of stoppage the pipes may be readily accessible.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-201-110, filed 12/27/90, effective 1/31/91; Regulation .94.100, effective 3/11/60.]

WAC 246-201-120 Traps. Each fixture or combination fixture should be provided with a separate, accessible, self-scouring, reliable water-seal trap placed as near to the fixture as possible.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-201-120, filed 12/27/90, effective 1/31/91; Regulation .94.110, effective 3/11/60.]

WAC 246-201-130 Pipes—Adequate air circulation. The building drainage system should be so designed that there will be adequate circulation of air in all pipes, and no danger of siphonage, aspiration, or forcing of trap seals under conditions of ordinary use.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-201-130, filed 12/27/90, effective 1/31/91; Regulation .94.120, effective 3/11/60.]

WAC 246-201-140 Soil stacks. The soil stack should extend full size upward through the roof and have a free opening, the roof terminal being so located that there will be no danger of air passing from it to any window and no danger of clogging of the pipe by frost or by articles being thrown into it or of roof water draining into it.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as 246-201-140, filed 12/27/90, effective 1/31/91; Regulation .94.130, effective 3/11/60.]

WAC 246-201-150 Water and air pressure tests. The plumbing system should be subjected to a water or air pressure test and to a final inspection in such manner as will disclose all leaks and imperfections in the work.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-201-150, filed 12/27/90, effective 1/31/91; Regulation .94.140, effective 3/11/60.]

WAC 246-201-160 Clogging substances. No substances which will clog the pipes, produce explosive mixtures, or destroy the pipes or their joints should be allowed to enter the building drainage system.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-201-160, filed 12/27/90, effective 1/31/91; Regulation .94.150, effective 3/11/60.]

WAC 246-201-170 Food receptacles and the drainage system. Refrigerators, ice boxes, or receptacles for storing food should not be connected directly with the drainage system.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–201–170, filed 12/27/90, effective 1/31/91; Regulation .94.160, effective 3/11/60.]

WAC 246-201-180 Location of water closets. No water closet should be located in a room or compartment which is not properly lighted and ventilated to the outer air.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–201–180, filed 12/27/90, effective 1/31/91; Regulation .94.170, effective 3/11/60.]

WAC 246-201-190 Disposal where no sewers. If water closets or other plumbing fixtures exist in buildings where there is no sewer within reasonable distance, suitable provisions should be made for disposing of the building sewage by a method of disposal which meets the requirements of the Washington state department of health.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-201-190, filed 12/27/90, effective 1/31/91; Regulation .94.180, effective 3/11/60.]

WAC 246-201-200 Backflow requirements. Where a building drainage system may be subjected to back flow of sewage, suitable provision should be made to prevent its overflow in the building.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-201-200, filed 12/27/90, effective 1/31/91; Regulation .94.190, effective 3/11/60.]

WAC 246-201-210 Sanitary maintenance. Plumbing systems should be maintained in a sanitary condition.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-201-210, filed 12/27/90, effective 1/31/91; Regulation .94.200, effective 3/11/60.]

Chapter 246–203 WAC GENERAL SANITATION

WAC	
246-203-010	Definition—Public or common nuisance.
246-203-020	Spitting.
246-203-030	Common towel.
246-203-060	Water sold to the public for drinking purposes in bot-
	tles or other containers.
246-203-070	Ice sold for public use.
246-203-080	Pollution of ground water prohibited.
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246-203-100	Disposal of human excreta.
246-203-110	Kitchen and laundry water.
246-203-120	Disposal of garbage, trash, rubbish, offal, dead ani-
	mals, and manure.
246-203-130	Keeping of animals.
246-203-140	Stagnant water.
246-203-150	Highway sanitation.
246-203-160	Sanitation of public buildings.
246-203-170	Objectionable establishments and industrial wastes.
246-203-180	Piggeries.
246–203–200	Disease producing organisms for rodent extermination forbidden.
246-203-210	Common drinking cups.

WAC 246-203-010 Definition—Public or common nuisance. For the purpose of these regulations, a public or common nuisance shall be considered as that which is set up, maintained or continued so as to be injurious to the health, or an obstruction to the use of property by interfering with the repose, health, safety or life of any considerable number of persons.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-203-010, filed 12/27/90, effective 1/31/91; Regulation .50.010, effective 3/11/60.]

WAC 246-203-020 Spitting. Spitting upon the floors or walls of a public building or buildings used for public assemblage, of a building used for manufacturing or industrial purposes, or upon the floors or platforms or any part of any railroad or trolley car or ferry boat, or any other public conveyance, is prohibited.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-203-020, filed 12/27/90, effective 1/31/91; Regulation .50.020, effective 3/11/60.]

WAC 246-203-030 Common towel. No person, firm, corporation or authorities owning, in charge of, or in control of any lavatory or wash room in any hotel, theatre, lodging house, restaurant, factory, school, church, store, office building, railway or trolley station, or public conveyance by land, water or air, or other institution or conveyance frequented by the public, or which may be used for the purpose of public assembly or as a place of employment, shall provide in or about such lavatory or washroom any towel for common use.

The term "common use" in this section shall be construed to mean, the use of all or any portion of a towel by more than one person without adequate cleansing.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-203-030, filed 12/27/90, effective 1/31/91; Regulation .50.030, effective 3/11/60.]

- WAC 246-203-060 Water sold to the public for drinking purposes in bottles or other containers. (1) Quality. No water shall be sold, offered for sale or rendered available for drinking purposes in bottles or other containers unless such water is of a sanitary quality approved by the state director of health.
- (2) Inspection. All plants for the preparation of water for sale in bottles or other containers for drinking purposes and the sources of the water supply shall be inspected as frequently as necessary by a representative of the state department of health, and samples of water collected for sanitary analyses at the state department of health laboratories.
- (3) Sterilizing containers. Bottles or other containers in which water is sold for drinking purposes shall be sterilized before refilling. The method of sterilization shall be approved by the state director of health.
- (4) Water purification. Processes of purification of waters that are to be sold for drinking purposes shall be approved by the state director of health before the water can be sold or offered for sale.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-203-060, filed 12/27/90, effective 1/31/91; Regulation .50.060, effective 3/11/60.]

- WAC 246-203-070 Ice sold for public use. (1) Quality. No ice shall be sold, offered for sale or rendered available for use to the public unless such ice is of a sanitary quality approved by the state director of health.
- (2) Information. Any company, corporation, city or individual selling artificial ice for public consumption shall submit to the state department of health complete information concerning the source of water supply used for the manufacture of the ice and a detailed description of the manufacturing processes involved.

Any company, corporation, city or individual harvesting natural ice shall file full information with the state department of health with regard to the source of the ice and method of storage.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-203-070, filed 12/27/90, effective 1/31/91; Regulation .50.070, effective 3/11/60.]

- WAC 246-203-080 Pollution of ground water prohibited. (1) No privy contents, drainage from a building, or the effluent from any sewage treatment device shall be discharged directly into any well, either abandoned or constructed for that purpose, that is carried to such a depth as to penetrate the water-bearing strata.
- (2) No privy contents, drainage from a building, or the effluent from any sewage treatment device shall be discharged into any crevice, sink-hole, or other opening, either natural or artificial, in a rock formation which will or may permit the pollution or contamination of

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ground water, except with the approval of the state director of health.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-203-080, filed 12/27/90, effective 1/31/91; Regulation .50.080, effective 3/11/60.]

WAC 246-203-090 Stream pollution. If, after investigation by the state department of health of any stream, lake, or other body of water within the state or forming the boundaries thereof, it is found that the entrance of sewage or industrial wastes are contributing sufficient pollution to endanger the public health and welfare, and the correction thereof is both possible and practicable, the state director of health will issue and enforce such special orders as may be necessary for the protection of the public health and welfare.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-203-090, filed 12/27/90, effective 1/31/91; Regulation .50.090, effective 3/11/60.]

- WAC 246-203-100 Disposal of human excreta. (1) Waters of the state defined. For the purpose of this regulation, the term "waters of the state" wherever used, shall include all streams and springs, and all bodies of surface and of ground water, whether natural or artificial, within the boundaries of the state.
- (2) Privies shall be fly-proof. No privy, cesspool, septic tank, or other receptacle for human excrement shall be constructed, maintained or used so that flies have or may have access to the excrementitious matter contained therein.
- (3) Privies shall not drain in any waters of the state. No privy, urinal, cesspool, septic tank or other receptacle for human excrement shall be constructed, maintained or used which directly or indirectly drains or discharges over or upon the surface of the ground, or into any waters of the state either directly or indirectly; unless the contents of such urinal, cesspool, septic tank or receptacle for human excrement are subjected to some recognized sterilization treatment approved by the state department of health.
- (4) Privies shall be kept clean. All privies, urinals, cesspools, septic tanks or other receptacles for human excrement shall be cleansed at sufficiently frequent intervals to prevent the contents from overflowing.
- (5) Treating excreta on watersheds of public water supplies. All schools, hamlets, villages, towns or industrial settlements which are now located or may be hereafter located on the watershed of any public water supply, not provided with a sewerage system, shall provide and maintain a reasonable system approved by the state director of health for collecting and disposing of all accumulations of human excrement within their respective jurisdiction or control.
- (6) Connection with sewer. No privy, cesspool, septic tank or similar receptacle for human excrement shall be constructed, maintained or used on premises where a sewer is at all accessible which is part of a sewerage system from which sewage is lawfully discharged into the waters of the state.

- (7) Use of human excreta for fertilizer prohibited. The contents of privies, cesspools, septic tanks or other receptacles for human excrement shall not be placed upon the surface of the ground or be used for fertilizing purposes for crops or gardens.
- (8) No privy near foodstuffs. No privy, urinal, toilet or other receptacle for human excrement shall be constructed, maintained or used in any room, or have direct connection with any room wherein any kind of exposed foods or foodstuffs are prepared, stored or handled.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-203-100, filed 12/27/90, effective 1/31/91; Regulation .50.100, effective 3/11/60.]

WAC 246-203-110 Kitchen and laundry water. No kitchen or laundry water shall be discharged or be permitted to discharge or flow into any gutter, street, roadway or public place.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-203-110, filed 12/27/90, effective 1/31/91; Regulation .50.110, effective 3/11/60.]

WAC 246-203-120 Disposal of garbage, trash, rubbish, offal, dead animals, and manure. (1) Definitions. For the purpose of these regulations the following definitions shall apply:

"Garbage" shall mean all solid and semisolid kitchen refuse subject to decay or putrefaction and all market waste of animal and vegetable matter which was intended to be used as food.

"Trash and rubbish" shall mean all waste material not of putrescible nature, which for the purpose of this regulation shall include ashes.

"Offal" shall mean waste animal matter from butcher, slaughter, or packing houses.

"Dead animals" shall mean all animals large and small which may die or which may be killed for other than food purposes.

"Manure" shall mean cleanings from all barns, stables, corrals, pens, or cars used for stabling or penning of animals or fowl.

- (2) Methods of disposal. Garbage, offal and manure; or rubbish, trash, and ashes mixed with garbage, offal or manure shall be disposed of by incineration, burial, sanitary fill or other method approved, and within a time limit set by the health officer. Such material shall not be disposed of by being deposited in any ditch, gulch, ravine, river, stream, lake, pond, nor upon the surface of the ground, on any highway rights of way, where it may become a nuisance or menace to health through the breeding of flies, harboring of rodents, or pollution of water.
- (3) Dead animals. The carcass of any dead animal shall be removed and disposed of by burial, incineration or other proper method within twenty-four hours after death. If the carcass is buried it shall be placed so that every part shall be covered by at least two feet of earth and at a location not less than 100 feet from any well, spring, stream or other surface waters, and in a place

not subject to overflow. In all cases of death from communicable disease, the carcass, if disposed of by burial, shall first be thoroughly enveloped in unslaked lime.

Proper disposal shall be made by the owner of the animal or by the owner of the property on which the dead animal is found. Where the owner of the animal is unknown and the carcass is found upon any street, alley or other public place, it shall be removed and disposed of by the county board of health at public expense.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-203-120, filed 12/27/90, effective 1/31/91; Regulation .50.120, effective 3/11/60; subsection (2) amended by filing of 6/3/65.]

- WAC 246-203-130 Keeping of animals. (1) Any person, firm or corporation is prohibited from keeping or sheltering animals in such a manner that a condition resulting from same shall constitute a nuisance.
- (2) In populous districts, stable manure must be kept in a covered watertight pit or chamber and shall be removed at least once a week during the period from April 1st to October 1st and, during the other months, at intervals sufficiently frequent to maintain a sanitary condition satisfactory to the health officer. Manure on farms or isolated premises other than dairy farms need not be so protected and removed unless ordered by the health officer.
- (3) Manure shall not be allowed to accumulate in any place where it can prejudicially affect any source of drinking water.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-203-130, filed 12/27/90, effective 1/31/91; Regulation .50.130, effective 3/11/60.]

- WAC 246-203-140 Stagnant water. (1) All marshes or swamps, and all pools or ponds, either natural or artificial, shall be maintained by the owners free from the breeding of mosquitoes. If treatment is required to prevent the breeding of mosquitoes, it shall be accomplished by filling, draining, stocking with larvae-eating fish, treating with larvicide or mineral oil or by some other method approved by the state department of health.
- (2) No person shall maintain or permit to be maintained any privy vault, cesspool, well, cistern, rain barrel, or other receptacle containing water in such condition that mosquitoes may breed therein.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-203-140, filed 12/27/90, effective 1/31/91; Regulation .50.140, effective 3/11/60.]

WAC 246-203-150 Highway sanitation. Any municipality, community, institution, corporation, association, firm or person who owns, operates, or maintains on or near any public highway, a place catering to the traveling public, shall maintain and operate said place in such a way that it does not constitute a menace to public health or a public nuisance.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-203-150, filed 12/27/90, effective 1/31/91; Regulation .50.150, effective 3/11/60.]

- WAC 246-203-160 Sanitation of public buildings. (1) Definition. A public building shall be construed to mean any theater, show-house, public hall, public meeting place, public transportation terminal, or any other public building not covered by specific regulations: *Provided*, That a public building shall not be construed to include any store, market, supermarket, or other commercial establishment open to the general public for commercial purposes which does not cater to an audience.
- (2) Lighting and ventilation. All public buildings shall be properly lighted and ventilated according to the type of said building and the uses to which it is put.
 - (3) Water supply.
- (a) Any public place supplied with water under pressure shall be equipped with sanitary drinking fountains of an approved type.
- (b) Where water supplied for drinking is not obtained from a public water supply, such water shall be of a quality approved by the secretary of the department of social and health services. When not under pressure, drinking water shall be stored in a covered container of an approved type.
 - (c) The use of the common drinking cup is prohibited.
- (4) Toilet facilities. Every public building shall be provided with adequate sanitary toilet facilities for each of the sexes; and such facilities shall be convenient and accessible. Every public building which must provide adequate sanitary toilet facilities shall provide at least one free sanitary toilet facility for each of the sexes. Where toilet facilities are voluntarily provided by any store, market, supermarket, or other commercial establishment for use by customers of such establishment or the general public, there shall be at least one free sanitary toilet facility provided for each of the sexes. It shall be the duty of the owner, manager, or other responsible person in charge to see that the toilet system is properly installed and maintained in a usable and sanitary condition at all times.

The method of sewage disposal for all public buildings shall comply with the rules and regulations of the state board of health.

(5) Cleaning. All public buildings shall be kept at all times in a clean and sanitary condition and the cleaning shall be carried on under proper sanitary conditions. All rooms used for public meetings shall be cleaned after each meeting held in them, such cleaning to consist of thorough sweeping of the floors and wiping of the woodwork, together with proper airing of the rooms. No room shall be swept without the use of a proper dust—laying substance. Dry dusting is prohibited. In construing this regulation all meetings held during the course of a single day shall be regarded as one meeting.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-203-160, filed 12/27/90, effective 1/31/91; Order 98, § 248-50-160, filed 4/5/74; Order 89, § 248-50-160, filed 10/3/73; Regulation .50.160, effective 3/11/60.]

WAC 246-203-170 Objectionable establishments and industrial wastes. (1) No person, partnership, firm or corporation maintaining a slaughter house, rendering

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works, depository of dead animals, glue works, tannery, wool washing establishment, paper mill, by-product coke oven, dye works, oil refinery, dairy, creamery, cheese factory, milk station or similar establishment; or engaged in the manufacture of gas, chemicals, explosives, fertilizers, or similar products; or in the business of soap making, fish oil extraction, bone boiling or similar occupation, shall allow any noxious exhalation, odors or gases that are deleterious or detrimental to public health to escape into the air, or any substance that is deleterious or detrimental to public health to accumulate upon the premises; or be thrown or allowed to discharge into any street, roadway or public place; or be thrown or allowed to discharge into any stream or other waters of the state.

(2) All slaughter houses, rendering works, bone boiling establishments, depositories for dead animals, garbage disposal works, piggeries and similar establishments handling organic matter shall have an adequate water supply for the purpose of keeping the place clean and sanitary. All floors shall be constructed of concrete or other impervious material and shall have adequate provision for drainage to a sewer or treatment works approved by the state department of health.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-203-170, filed 12/27/90, effective 1/31/91; Regulation .50.170, effective 3/11/60.]

WAC 246-203-180 Piggeries. (1) No pigsty or piggery shall be built or maintained on marshy ground or land subject to overflow, nor within 200 feet of any stream or other source of water supply.

- (2) When garbage is fed to pigs all unconsumed garbage shall be removed daily and disposed of by burial or incineration.
- (3) No organic material furnishing food for flies shall be allowed to accumulate on the premises.
- (4) All garbage shall be handled and fed upon platforms of concrete or other impervious material.
- (5) Unslaked lime, hypochlorite of lime, borax or mineral oil shall be used daily in sufficient quantities to prevent offensive odors and the breeding to flies.
- (6) All garbage, offal and flesh fed to swine must be sterilized by cooking before feeding.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as \$246-203-180, filed 12/27/90, effective 1/31/91; Order 44, \$248-50-180, filed 12/11/70; Regulation .50.180, effective 3/11/60.]

WAC 246-203-200 Disease producing organisms for rodent extermination forbidden. The use of any disease-producing organisms such as the so-called "rat viruses" or any bacteria for the purpose of rodent extermination is prohibited.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-203-200, filed 12/27/90, effective 1/31/91; Regulation .50.200, effective 3/11/60.]

WAC 246-203-210 Common drinking cups. No person, firm, corporation or authorities owning, in charge of, or in control of any hotel, theatre, restaurant, lodging house, factory, school, church, store, office

building, railway, trolley or other public conveyance station, or public conveyance by land, water or air, or other institution or conveyance frequented by the public or which may be used for the purpose of public assembly or as a place of employment, is permitted to furnish any cup, vessel or other receptacle for common use in any such place for drinking or eating purposes.

The term "common use" in this section shall be construed to mean, for use by more than one person without adequate cleansing.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-203-210, filed 12/27/90, effective 1/31/91; Regulation .50.210, effective 3/11/60.]

Chapter 246–215 WAC FOOD SERVICE

WAC	
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WAC 246-215-001 Scope and purpose. These regulations, as authorized under RCW 43.20.050, are adopted to protect the health, safety and well-being of the public and to prevent the spread of disease.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–215–001, filed 12/27/90, effective 1/31/91; 80–14–059 (Order 203), § 248–84–001, filed 10/1/80; Regulation .84.001, filed 6/4/63; Regulation .84.001, effective 3/11/60.]

WAC 246-215-009 Definitions. The following definitions shall apply in the interpretation and enforcement of these rules and regulations:

- (1) "Adulterated" shall mean the condition of a food:
- (a) If a food bears or contains any poisonous or deleterious substance in a quantity which may render the food injurious to health;
- (b) If a food bears or contains any added poisons or deleterious substance for which no safe tolerance has

been established by regulation, or in excess of such tolerance if one has been established;

- (c) If a food consists in whole or in part of any filthy, putrid, or decomposed substance, or if the food is otherwise unfit for human consumption;
- (d) If a food has been processed, prepared, packed, or held under insanitary conditions, whereby the food may have been rendered injurious to health;
- (e) If a food container is composed in whole or in part of any poisonous or deleterious substance which may render the contents injurious to health; or
- (f) If a food is in whole or in part the product of a diseased animal, or an animal which has died other than by slaughter: *Provided*, That game animals which died other than by slaughter and which meet all other criteria of this definition, may be approved by the health officer for use by temporary food service establishments.
- (2) "Approved" shall mean acceptable to the health officer based on his or her determination as to conformance with appropriate standards and good public health practice.
- (3) "Bulk food" shall mean unpackaged or unwrapped, processed or unprocessed food, stored in aggregate quantities from which quantities desired by the consumer may be withdrawn. Bulk food does not include: Potentially hazardous food; raw fruits or vegetables; or buffet, salad bar, or smorgasbord—type of service in food service establishments.
- (4) "Closed" shall mean fitted together snugly leaving no openings large enough to permit the entrance of vermin.
- (5) "Corrosion-resistant material" shall mean a material maintaining its original surface characteristics under prolonged influence of the food, cleaning compounds and sanitizing solutions which may contact it.
- (6) "Easily cleanable" shall mean readily accessible and of such material and finish, and so fabricated that residue may be completely removed by normal cleaning methods.
- (7) "Employee" shall mean the permit holder, individuals having supervisory or management duties, and any other person working in a food service establishment.
- (8) "Equipment" shall mean all stoves, ovens, ranges, hoods, slicers, mixers, meat blocks, tables, counters, refrigerators, sinks, dishwashing machines, steam tables, and similar items, other than utensils, used in the operation of food service establishments.
- (9) "Food" shall mean any raw, cooked, or processed edible substance, ice, beverage, or ingredient used or intended for use, or for sale in whole or in part for human consumption.
- (10) "Food-contact surfaces" shall mean those surfaces of equipment and utensils with which food normally comes in contact, and those surfaces from which food may drain, drip, or splash back onto surfaces normally in contact with food.
- (11) "Food processing establishment" shall mean any commercial establishment, other than a restaurant, snack bar, mobile restaurant, temporary food services establishment, retail bakery or catering kitchen, where

- food is processed or otherwise prepared or packaged, or where any potentially hazardous food is placed, packaged or repackaged into another container for consumption or for resale.
- (12) "Food service establishment" shall mean, but not be limited to: Any restaurant; snack bar; tavern; bar; night club; industrial feeding establishment; grocery store; retail meat market; retail fish market; retail bakery; delicatessen; mobile food service unit; temporary food service establishment; private, public, or nonprofit organization or institution routinely serving food; catering kitchen; commissary or similar place where food or drink is prepared for sale or for service on the premises or elsewhere; and any other establishment or operation where food is served or provided for the public with or without charge.
- (13) "Health officer" shall mean the city, county, city-county, or district health officer as defined in RCW 70.05.010(2) or his or her authorized representative.
- (14) "Hermetically sealed container" shall mean a container designed and intended to be secure against the entry of microorganisms and to maintain the commercial sterility of the container's contents after processing.
- (15) "Kitchenware" shall mean all multi-use utensils other than tableware used in the storage, preparation, conveying, or serving of food.
- (16) "Mislabeled" shall mean the presence of any written, printed, or graphic matter upon or accompanying food or containers of food which is false or misleading or violating any applicable state or local labeling requirements.
- (17) "Mobile food unit" means a food service establishment designed to be readily movable.
- (18) "Person" shall mean an individual, firm, corporation, partnership, association, or agency of state, county, or municipal government, or agency of the federal government subject to the jurisdiction of the state.
- (19) "Person in charge" shall mean the individual present in a food service establishment who is the apparent supervisor of the food service establishment at the time of inspection. If no individual is the apparent supervisor, then any employee present is the person in charge.
- (20) "Potentially hazardous food" shall mean any food consisting in whole or in part of milk or milk products, eggs, meat, poultry, fish, shellfish, edible crustacea, or other natural or synthetic ingredients capable of supporting rapid and progressive growth of infectious or toxigenic microorganisms. The term does not include clean, whole, uncracked, odor—free shell eggs or foods having a pH level of 4.6 or below or a water activity (a_w) value of 0.85 or less.
- (21) "Ready-to-eat food" shall mean bulk food normally eaten by the consumer without cooking. Nuts in the shell are not included in this definition.
- (22) "Reconstituted" shall mean dehydrated food products recombined with water or other liquids.
- (23) "Sanitization" shall mean effective bactericidal treatment by a process providing enough accumulative heat or concentration of chemicals for enough time to

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reduce the bacterial count, including pathogens, to a safe level on utensils, work surfaces, and equipment.

- (24) "Sealed" shall mean free of cracks or other openings permitting the entry or passage of moisture.
- (25) "Single-service articles" shall mean cups, containers, lids, closures, plates, knives, forks, spoons, stirrers, paddles, straws, napkins, wrapping materials, toothpicks, and similar articles intended for one-time, one-person use and then discarded.
- (26) "Tableware" shall mean all multi-use eating and drinking utensils.
- (27) "Temporary food service establishment" shall mean a food service establishment operating at a fixed location for a period of time of not more than fourteen consecutive days in conjunction with a single event or celebration.
- (28) "Utensil" shall mean any implement used in the storage, preparation, transportation, or service of food.
- (29) "Wholesome" shall mean in sound condition, clean, free from adulteration, and otherwise suitable for use as human food.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-215-009, filed 12/27/90, effective 1/31/91; 84-14-090 (Order 274), § 248-84-002, filed 7/3/84; 80-14-059 (Order 203), § 248-84-002, filed 10/1/80.]

- WAC 246-215-019 Food supplies. (1) All food in food service establishments shall be from approved sources; in compliance with applicable state and local laws, ordinances, and regulations; and clean, wholesome, free from spoilage, free from adulteration and mislabeling, and safe for human consumption. No hermetically sealed food which has been processed in a place other than an approved commercial food processing establishment shall be used.
- (2) Fluid milk and fluid milk products used or served shall be pasteurized and shall meet the Grade A quality standards as established by law, except that Grade A raw milk (as defined in RCW 15.36.140) may be sold in the original container for off-premises consumption. Dry milk and dry milk products shall be made from pasteurized milk and milk products.
- (3) Fresh and frozen shellfish (oysters, clams, or mussels) shall be from sources approved by the department of social and health services.
- (4) Only clean whole eggs, with shell intact and without cracks or checks, or pasteurized egg products shall be used or sold, except that hard-boiled, peeled eggs, commercially prepared and packaged, may be used or sold.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-215-019, filed 12/27/90, effective 1/31/91; 80-14-059 (Order 203), § 248-84-010, filed 10/1/80; Regulation .84.010, filed 6/4/63; Regulation .84.010, effective 3/11/60.]

WAC 246-215-029 Food protection and storage. (1) Food shall be protected at all times from potential or real contamination or adulteration including, but not limited to; dust, insects, rodents, unclean equipment, utensils, tableware and work surfaces, unnecessary handling, coughs and sneezes, flooding, drainage, and overhead leaks or drips from condensation, and toxic

chemicals while transported, stored, prepared, displayed and served.

- (2) The temperature of potentially hazardous food shall be maintained at 45 degrees Fahrenheit or below or 140 degrees Fahrenheit or above at all times, except as provided by this regulation.
- (3) In the event of a fire, flood, or similar event that might result in the contamination of food, or that might prevent potentially hazardous and/or perishable food from being held at required temperatures, the person in charge shall immediately contact the health officer. Upon receiving notice of this occurrence, the health officer shall take whatever action he/she deems necessary to protect the public health.
- (4) Food, whether raw or prepared, if removed from its original container, shall be stored in a clean, labeled, covered container except during necessary periods of preparation or service. Once opened any product remaining in the original container shall be covered. Container covers shall be impervious and nonabsorbent, except that linens or napkins may be used for lining or covering bread or roll containers.
- (5) Containers of food shall be stored above floor level to protect them from contamination and in a manner that permits easy cleaning; except that bulk foods may be stored in impervious, closed containers, and pressurized beverage containers and foods protected by glass containers or canned goods may be stored on dry floor surfaces if easy cleaning is permitted.
- (6) Enough conveniently located refrigeration facilities and hot food storage facilities shall be provided to assure the maintenance of potentially hazardous food at the required temperatures during storage.
- (7) Each refrigeration unit shall be equipped with a numerically scaled thermometer, accurate to ± 3 degrees Fahrenheit, and located so as to be easily readable in the warmest part of the facility. Each hot food facility used for storing potentially hazardous food shall be equipped with a numerically scaled thermometer accurate to ± 3 degrees Fahrenheit, and located so as to be easily readable, in the coolest part of the facility. Where it is impractical to install thermometers on hot food facilities, a product thermometer must be available and used to check internal food temperatures.
- (8) Frozen food shall be kept frozen until such time as it is to be thawed for use. Frozen food facilities shall be maintained at 0 degrees Fahrenheit or below.
- (9) Only such poisonous and toxic materials as are required to maintain sanitary conditions and for sanitizing purposes may be used or stored in food service establishments: *Provided*, That retail grocery stores may be exempted from this requirement when such products are handled in a manner acceptable to the health officer. Poisons and toxic materials shall be identified, and shall be used, stored, and displayed only in such a manner and under such conditions as will not contaminate or adulterate food or constitute a hazard to employees or customers.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-215-029, filed 12/27/90, effective 1/31/91; 80-14-059 (Order 203), § 248-84-015, filed 10/1/80.]

- WAC 246-215-039 Food preparation, display, service and transportation. (1) Food shall be prepared, displayed, served and transported with the least possible manual contact, with suitable utensils, and on surfaces that, prior to use, have been cleaned, rinsed, and sanitized to prevent cross-contamination.
- (2) Serving utensils shall be properly stored between uses during service.
- (3) All parts of potentially hazardous foods requiring cooking shall be cooked (with no interruption in the cooking process) to the minimum internal temperatures as shown below:

Poultry, poultry stuffings, stuffed meats and stuffings containing meats

Pork and any food containing pork

Rare roast beef and rare beef steak (unless otherwise ordered by the immediate consumer)

All other potentially hazardous foods requiring cooking

TEMPERATURE

165 degrees F

150 degrees F

- (4) All potentially hazardous foods that have been cooked and then refrigerated, shall be rapidly reheated to 165 degrees Fahrenheit or greater throughout before being served or placed in a hot food storage facility. Steam tables, bain-maries, warmers, and similar hot food-holding facilities are prohibited for the rapid reheating of potentially hazardous foods.
 - (5) Potentially hazardous foods shall be thawed:
- (a) In refrigerated units at a temperature not to exceed 45 degrees Farenheit; or
- (b) Under potable running water of a temperature of 70 degrees Fahrenheit or below, with sufficient water velocity to agitate and float off loose food particles into the overflow; or
- (c) In a microwave oven only when the food will be immediately transferred to conventional cooking facilities as part of a continuous cooking process or when the entire, uninterrupted cooking process takes place in the microwave oven; or
 - (d) By other methods approved by the health officer.
- (6) Once served to a customer, portions of leftover food shall not be served again; except that packaged food other than potentially hazardous food, that is still packaged and is in sound condition and is wholesome may be reserved.
- (7) All foods to be served raw shall be thoroughly washed with potable water before they are served.
- (8) Metal stem-type, numerically scaled indicating thermometers accurate to ±2 degrees Fahrenheit shall be provided and used by employees to assure the attainment and maintenance of safe internal cooking, holding and refrigeration temperatures of potentially hazardous foods.
- (9) Potentially hazardous foods requiring refrigeration after preparation shall be rapidly cooled to 45 degrees Fahrenheit or below. Potentially hazardous foods of

large volume or prepared in large quantities shall be rapidly cooled utilizing such methods as:

- (a) Quick chilling with running cold water bath or an ice bath coupled with agitation.
- (b) Storage of foods in small containers in freezer units coupled with agitation.
 - (c) Shallow pans food depth of 4" or less.
 - (d) Other approved methods.

In all cases potentially hazardous foods shall be cooled to 70 degrees Fahrenheit or below within two hours or less and to 45 degrees Fahrenheit or below within four hours or less time after removal from a hot-holding device or the end of the cooking process.

- (10) Preparation of potentially hazardous salads (such as potato or macaroni types) shall be completed using prechilled ingredients to assure minimum temperature rise during preparation.
- (11) Potentially hazardous foods to be transported or stored on ice (as in a buffet line) shall be prechilled to 45 degrees Fahrenheit or below.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–215–039, filed 12/27/90, effective 1/31/91; 80–14–059 (Order 203), § 248–84–020, filed 10/1/80; Regulation .84.020, filed 6/4/63; Regulation .84.020, effective 3/11/60.]

WAC 246-215-049 Personnel. (1) Employee health: No person, while infected with a disease in a communicable form that can be transmitted by foods or who is a carrier of organisms that cause such a disease or while afflicted with a boil, an infected wound, or an acute respiratory infection, shall work in a food service establishment in any capacity in which there is a likelihood of such person contaminating food or food—contact surfaces with pathogenic organisms or transmitting disease to other persons.

(2) Cleanliness:

All employees shall wear clean outer garments, maintain a high degree of personal cleanliness, conform to proper hygienic practices and use effective hair restraints when necessary. They shall wash their hands thoroughly in an approved handwashing facility before starting work, during work as often as is necessary to prevent contamination of food such as after handling unclean items, raw foods, or using the toilet.

The use of tobacco in any form shall not be permitted in any areas where food is prepared or stored or where utensils are cleaned or stored.

- (3) Food and beverage service worker's permit:
- (a) The provision of the state board of health for food and beverage service worker's permits (chapter 248–86 WAC) and the rules and regulations of the state board of health governing food workers (chapter 248–87 WAC) and chapter 197, Laws of 1957 (chapter 69.06 RCW) shall be complied with. Food and beverage service worker's permits shall be issued and signed by the health officer.
- (b) No person shall work, or be employed in a food service establishment without a valid food and beverage service worker's permit: *Provided*, That an employee may have up to thirty days to obtain said permit from

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the first day of employment in that food service establishment.

- (c) It shall be the duty of the owner, manager or other person in charge of a food establishment to ensure that all workers or employees therein obtain and maintain valid permits as herein required.
 - (4) Dressing rooms:

Adequate facilities shall be provided for the orderly storage of employees' clothing and personal belongings. Where employees routinely change clothes within the establishment, designated areas shall be located outside of the food preparation, storage, and serving areas, and the equipment and utensil washing and storage area: *Provided*, That when approved by the health officer such an area may be located in a storage room where only completely packaged food is stored. Dressing rooms shall be kept clean.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–215–049, filed 12/27/90, effective 1/31/91; 80–14–059 (Order 203), § 248–84–025, filed 10/1/80.]

WAC 246-215-059 Sanitary design, construction, and installation of equipment and utensils. (1) All equipment and utensils shall be so designed and of such material and workmanship as to be smooth, easily cleanable and durable, in good repair, and meet the requirements of the National Sanitation Foundation or equivalent. The food contact surfaces of such equipment and utensils shall be easily accessible for cleaning, nontoxic, corrosion resistant, and nonabsorbent.

- (2) All equipment shall be so installed and maintained as to facilitate the cleaning thereof, and of all adjacent areas. The equipment shall not be located under exposed or unprotected sewer lines, open stairwells, or other sources of contamination.
- (3)(a) All food service establishments where the operations require cleaning and sanitizing of equipment and utensils shall be equipped with either approved mechanical dishwashing facilities or facilities for proper manual dishwashing operations.
- (b) When equipped with a mechanical dishwashing unit, a sink with a minimum of two compartments shall also be provided in the dishwashing area.
- (c) When manual dishwashing operations are used, a sink with a minimum of three compartments shall be provided in the dishwashing area.
- (d) In bars and taverns, an extra sink compartment shall be provided at the bar in addition to those necessary for normal cleaning and sanitizing processes: *Provided*, That subsections (3)(b) and (d) of this section shall only apply to food service establishments constructed or remodeled after the effective date of these regulations.
- (e) Sinks used for handwashing or equipment or utensil washing shall not be used for food preparation.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-215-059, filed 12/27/90, effective 1/31/91; 84-14-090 (Order 274), § 248-84-030, filed 7/3/84; 80-14-059 (Order 203), § 248-84-030, filed 10/1/80; Regulation .84.030, filed 6/4/63; Regulation .84.030 effective 3/11/60.]

WAC 246-215-069 Equipment and utensil cleaning and sanitation. (1) All eating and drinking utensils shall be thoroughly cleaned and sanitized after each usage.

- (2) Cooking surfaces of equipment shall be cleaned at least once a day.
- (3) All kitchenware and food-contact surfaces of equipment, exclusive of cooking surfaces of equipment, used in the preparation or serving of food or drink, and all food storage utensils, shall be thoroughly cleaned after each use. All utensils and food-contact surfaces of equipment used in preparation, service, display, or storage of potentially hazardous food shall be sanitized prior to such use, and following any interruption of operations during which contamination of the food-contact surfaces is likely to have occurred.
- (4) Where equipment and utensils are used for the preparation of potentially hazardous food on a continuous or a production line basis, the food-contact surfaces of such equipment and utensils shall be cleaned and sanitized at intervals throughout the day on a schedule approved by the health officer.
- (5) Nonfood-contact surfaces of equipment shall be cleaned at such intervals as to keep the surfaces in a clean and sanitary condition.
- (6) Cleaning and sanitizing of kitchenware, tableware, food contact surfaces of equipment and utensils shall conform to methods approved by the health officer.
- (7) Cloths used for wiping food spills on tableware, such as plates or bowls being served to the customer, shall be clean, dry, and used for no other purpose.
- (8) Moist cloths used for wiping up food spills or wiping work surfaces or equipment or utensils or food workers' hands shall be clean and shall be rinsed frequently in an approved sanitizing solution and used for no other purpose.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-215-069, filed 12/27/90, effective 1/31/91; 84-14-090 (Order 274), § 248-84-035, filed 7/3/84; 80-14-059 (Order 203), § 248-84-035, filed 10/1/80.]

WAC 246-215-079 Sanitary facilities and controls. (1) Water supply:

- (a) The water supply shall be adequate, of a safe, sanitary quality and from an approved source. Bottled water if used in a food service establishment shall be from an approved source. Hot and cold running water under pressure shall be provided in all areas where food is prepared, or equipment, utensils, or containers are washed.
- (b) Ice used for any purpose shall be made from water which comes from an approved source, and shall be used only if it has been manufactured, stored, transported, and handled in a sanitary manner.
- (2) Sewage disposal: All sewage shall be disposed of in a public sewerage system or, in a sewage disposal system approved by the health officer.
- (3) Plumbing: Plumbing shall be sized, installed, and maintained according to the local plumbing codes. There shall be no cross—connection between the potable water supply and any nonpotable or questionable water supply nor any source of pollution through which the potable

water supply might become contaminated. Except for properly trapped open sinks, there shall be no direct connection between the sewerage system and any drains originating from equipment in which food, portable equipment or utensils are placed.

- (4) Toilet facilities: Each food service establishment shall be provided with adequate, conveniently located toilet facilities for its employees. Toilet fixtures shall be of sanitary design and easily cleanable. Toilet facilities, including rooms and fixtures, shall be kept in a clean condition and in good repair. Toilet tissue shall be provided. Easily cleanable receptacles shall be provided for waste materials, and one such receptacle in the woman's toilet room shall be covered. When toilet facilities are provided for patrons, such facilities shall meet the requirements of this subsection.
 - (5) Handwashing facilities:
- (a) Lavatories shall be at least the number required by law, shall be installed according to law, and shall be located to permit convenient use by all employees in food preparation areas and utensil washing areas.
- (b) Lavatories shall be accessible to employees at all times.
- (c) Lavatories shall also be located in or immediately adjacent to toilet rooms or vestibules.
- (d) Each lavatory shall be equipped with hot and cold or tempered running water, handcleaning soap or detergent, and single use or approved sanitary towels or other approved hand drying devices.
- (e) Such facilities shall be kept clean and in good repair.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-215-079, filed 12/27/90, effective 1/31/91; 80-14-059 (Order 203), § 248-84-040, filed 10/1/80; Regulation .84.040, filed 6/4/63; Regulation .84.040, effective 3/11/60.]

WAC 246-215-089 Garbage and rubbish. All garbage and rubbish containing food wastes shall, prior to disposal, be kept in leak-proof, nonabsorbent containers which shall be kept covered with tight-fitting lids when filled or stored, or not in continuous use: Provided, That such containers need not be covered when stored in a closed vermin-proofed room or enclosure, or in a food waste refrigerator. All other rubbish shall be stored in containers, rooms or areas in an approved manner. The rooms, enclosures, areas and containers used shall be adequate for the storage of all food waste and rubbish accumulating on the premises. Adequate cleaning facilities shall be provided, and each container, room, or area shall be thoroughly cleaned as needed. Food waste grinders, if used, shall be installed in compliance with state and local standards and shall be of suitable construction. All garbage and rubbish shall be disposed of with sufficient frequency and in such a manner as to prevent a nuisance.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-215-089, filed 12/27/90, effective 1/31/91; 80-14-059 (Order 203), § 248-84-045, filed 10/1/80.]

WAC 246-215-099 Insect and rodent control. (1) Effective measures intended to minimize the entry and

presence of rodents, flies, cockroaches, and other vectors on the premises shall be utilized. The premises shall be kept in such condition as to prevent the harborage or feeding of insects or rodents.

(2) When pesticides are used to eliminate or control rodents or insects the application shall be in accordance with label directions, applicable Washington state department of agriculture regulations (chapter 16–228 WAC), and shall not adulterate food or contaminate food contact surfaces.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–215–099, filed 12/27/90, effective 1/31/91; 80–14–059 (Order 203), § 248–84–050, filed 10/1/80; Regulation .84.050, filed 6/4/63; Regulation .84.050, effective 3/11/60.]

WAC 246-215-109 Construction and maintenance of physical facilities. (1) Floors:

Floors and floor coverings of all food preparation, food and utensil storage, and utensil washing areas, and the floor of all walk-in refrigeration units, dressing rooms, locker rooms, toilet rooms and vestibules shall be constructed of water impervious, grease resistant, easily cleanable, smooth, safe, and durable material and shall be kept clean and in good repair. Carpeting, if used as a floor covering, shall be of approved construction, properly installed, easily cleanable, and maintained in good repair. Carpeting is prohibited in food preparation, equipment and utensil washing areas, food storage areas and toilet room areas where urinals or toilet fixtures are located. The use of sawdust, wood shavings, peanut hulls or similar material as floor covering is prohibited. Properly installed, trapped floor drains shall be provided in floors that are water flushed for cleaning or that receive discharges of water or other fluid waste from equipment, or in areas where pressure spray methods for cleaning equipment are used.

(2) Walls and ceilings:

The walls, including nonsupporting partitions, doors and windows, wall coverings, and ceilings of walk—in refrigeration units, food preparation areas, utensil and equipment washing areas and toilet rooms shall be smooth, nonabsorbent, and easily cleanable. Walls and ceilings shall be clean and in good repair.

- (3) Lighting and ventilation:
- (a) All areas in which food is prepared or stored or equipment and utensils are washed, handwashing areas, dressing or locker rooms, toilet rooms, and garbage and rubbish storage areas shall be well lighted. During all clean—up activities, adequate light shall be provided in the area being cleaned, and upon or around equipment being cleaned.
- (b) All rooms in which food is prepared or served or utensils and equipment are washed, dressing or locker rooms, toilet rooms and garbage and rubbish storage areas shall be well ventilated. Ventilation hoods and devices shall be designed to prevent grease or condensate from dripping onto food or onto food preparation surfaces. Filters shall be readily removable for cleaning or replacement. All rooms shall have sufficient ventilation to keep them free of excessive heat, steam, condensation, vapors, obnoxious odors, smoke and fumes. Ventilation

systems shall comply with applicable state and local fire prevention, building and mechanical code requirements.

- (4) Premises:
- (a) Food service establishments and all parts of property used in connection with their operations shall be kept free of litter. The walking and driving surfaces shall be maintained. Only articles necessary for the operation and maintenance of the food service establishment shall be stored on the premises. No operation of a food service establishment shall be conducted in any room used as living or sleeping quarters. Food service operations shall be separated from any living or sleeping quarters by complete partitioning and solid doors.
- (b) No live animals, including birds and turtles, shall be allowed in any area used for the conduct of food service establishment operations. This exclusion does not apply to edible fish, crustacea, shellfish, or to fish in aquariums. Patrol dogs accompanying security or police officers, or guide dogs accompanying blind or deaf persons, shall be permitted in dining areas.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-215-109, filed 12/27/90, effective 1/31/91; 80-14-059 (Order 203), § 248-84-055, filed 10/1/80.]

- WAC 246-215-119 Mobile units. The requirements for a mobile food unit are the same as for other food service establishments wherever the requirements are applicable.
- (1) The vehicle must be an approved type and acceptable to the health officer, based on his/her determination as to conformance with appropriate standards and good public health practice.
- (2) During transportation of food from a food service establishment, all food shall be completely wrapped or packaged so as to be protected from contamination.
- (3) Potentially hazardous food must be kept at or below 45 degrees Fahrenheit or at 140 degrees Fahrenheit or above while transported, stored, or on display.
- (4) All employees shall wear clean outer garments, maintain a high degree of personal cleanliness, and conform to good hygenic practices while on duty as contained in WAC 248-84-025.
- (5) Mobile food units serving only prepared, packaged foods in individual servings or beverages which are protected from contamination are exempted from requirements of water supply and sewage disposal. When a mobile food unit has a water system the source and system design shall be approved by the health officer. Liquid waste shall be retained in the mobile unit and/or disposed of by a method approved by the health officer.
- (6) The health officer may impose additional requirements when needed to assure the service of safe food and may prohibit the sale of certain potentially hazardous foods and may modify specific requirements for physical facilities when, in his/her opinion, no imminent health hazard will result.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-215-119, filed 12/27/90, effective 1/31/91; 80-14-059 (Order 203), § 248-84-060, filed 10/1/80; Regulation .84.060, filed 6/4/63; Rules (part), effective 3/11/60.]

- WAC 246-215-129 Bulk foods, storage, and display. The requirements for bulk foods are the same as for other foods except as specified in this section.
- (1) All bulk food display units shall be properly labeled including the common name of the food and/or ingredients (if applicable). Labels for customers to identify bulk foods purchased shall be available upon request. Stocking practices shall promote proper stock rotation.
- (2) All bulk food display units shall be separated from any containers of chemicals which might contaminate bulk foods and from pet food by some means approved by the health officer; such as horizontal or vertical separation, separate aisles, or partitions. Bulk containers of chemicals or pet food shall be properly labeled.
- (3) A person shall be designated by the management of each food service establishment selling bulk food to be responsible for the bulk food area. This assigned person is responsible for overseeing bulk food operations and shall:
- (a) Police the bulk food storage and display areas to discourage tampering with bulk foods and to prevent contamination of bulk foods by customers;
- (b) Label bulk food display units, clean up any spills that occur, and rotate stock;
- (c) Clean and sanitize storage containers and utensils used for food storage or handling of bulk foods;
- (d) Dispose of any bulk foods returned to the food service establishment.
- (4) Ready-to-eat bulk food shall be protected from potential sources of contamination by the following methods during dispensing:
- (a) Foods shall be dispensed by an employee possessing a valid food and beverage service workers permit; or
- (b) Foods shall be dispensed by gravity feed or other types of dispensers approved by the health officer; or
- (c) Foods may be dispensed by the customer: *Provided*, That the consistency (stickiness) or shape of the food precludes dispensing by the preceding methods described in (b) of this subsection and: *Provided further*, That foods are dispensed from an approved bulk food display unit with a self-closing lid using proper utensils.
- (5) All bulk foods shall be stored and displayed in properly constructed display units or storage containers with properly constructed covers or lids. Properly designed, easily cleanable scoops, or other dispensing utensils shall be present to minimize hand contact with bulk foods. When bulk food storage containers are lined with plastic liners, liners shall be food—grade plastic only. The use of garbage can liners for lining bulk food containers is prohibited.
- (6) All containers used for display of ready-to-eat foods shall be at least thirty inches at the lowest access point above floor level, except for honey, oil, or similar liquid products as approved by the health officer.
- (7) Any spilled bulk food shall be cleaned up immediately using vacuums, brooms, or mops as appropriate. All spilled bulk food shall be discarded. Any bulk food returned to the food service establishment shall not be

returned to the storage container or display unit or resold. Any returned bulk food shall be promptly discarded.

- (8) Dispensing utensils shall be stored in the food with the handle extended out of the food or stored clean and dry in a protective enclosure or utensil holder. A separate utensil shall be provided for each food item. Bulk food containers and utensils shall be cleaned and sanitized prior to refilling or when the containers become soiled.
- (9) Regular surveillance of bulk food storage and display areas for evidence of pests shall be performed by a qualified store employee or licensed pest control operator. If any evidence of infestation is discovered, appropriate control measures shall be implemented. If pesticides are applied, only a licensed store employee or pest control operator shall make such application. Pesticides, if used, shall be applied in accordance with label directions. Adequate precautions shall be taken to ensure contamination of bulk foods or food contact surfaces does not occur.
- (10) WAC 248-152-030(7) prohibits smoking in all public areas of retail food stores. No smoking signs shall be posted in the bulk food display areas. Store employees should inform smokers of this requirement when smoking is observed.
- (11) WAC 248-84-062 shall apply to all new bulk food operations starting on or after July 1, 1984. Existing bulk food operations in place before July 1, 1984, have until January 1, 1985, to comply with requirements contained in subsections (2), (4), (5), (6), and (8) of this section.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-215-129, filed 12/27/90, effective 1/31/91; 84-14-090 (Order 274), § 248-84-062, filed 7/3/84.]

WAC 246-215-139 Temporary food service establishments. (1) A temporary food service establishment shall comply with the requirements of these regulations, except as otherwise provided in this chapter. The health officer may impose additional requirements to protect against health hazards related to the conduct of the temporary food service establishment, may prohibit the sale of some or all potential hazardous foods, and when no health hazard will result, may waive or modify requirements of these regulations.

- (2) Restricted operations:
- (a) These provisions are applicable whenever a temporary food service establishment is permitted, under the above provisions of these regulations, to operate without complying with all the requirements of this chapter.
- (b) Only those potentially hazardous foods requiring limited preparation, such as hamburgers and frankfurters that only require seasoning and cooking, shall be prepared or served. The preparation or service of other potentially hazardous foods, including pastries filled with cream or synthetic cream, custards, and similar products, and salads or sandwiches containing meat, poultry, eggs or fish is prohibited. This prohibition does not apply to any potentially hazardous food that has

been prepared and packaged under conditions meeting the requirements of this ordinance, is obtained in individual servings, is stored at a temperature of 45 degrees Fahrenheit or below or at a temperature of 140 degrees Fahrenheit or above in facilities meeting the requirements of these regulations, and is served directly in the unopened container in which it was packaged.

- (3) Ice: Ice that is consumed or that contacts food shall be made under conditions meeting the requirements of these regulations. The ice shall be obtained only in chipped, crushed, or cubed form and in single—use safe plastic or wet—strength paper bags filled and sealed at the point of manufacture. The ice shall be held in these bags until it is dispensed in a way that protects it from contamination.
- (4) Single-service articles: All temporary food service establishments without effective facilities for cleaning and sanitizing tableware shall provide only single-service articles for use by the consumer.
- (5) Wet storage: Storage of packaged food in contact with water or undrained ice is prohibited. Wrapped sandwiches shall not be stored in direct contact with ice.
- (6) Handwashing: A convenient handwashing facility shall be available for employee handwashing. This facility shall consist of, at least, warm running water, soap, and individual paper towels.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-215-139, filed 12/27/90, effective 1/31/91; 80-14-059 (Order 203), § 248-84-065, filed 10/1/80.]

WAC 246-215-149 Permits required, suspension and revocation procedures. (1) Permit:

- (a) Permit required: No person shall operate a food service establishment who does not have a valid permit issued to him/her by the health officer. A valid permit shall be conspicuously posted in every food service establishment, mobile food unit and temporary food service establishment.
- (b) Issuance of permits: Any person desiring to operate a food service establishment, mobile food unit or temporary food service establishment shall make written application for a permit on forms provided by the health officer. An inspection may be required by the health officer for the renewal of a permit and will be required prior to opening for all new permits; to determine compliance with these regulations.
 - (2) Suspension of permits:
- (a) The health officer may suspend any permit to operate a food service establishment, mobile food unit or temporary food service establishment if the holder of the permit does not comply with the requirements of these regulations, or if the operation of the establishment does not comply with the requirements of these regulations, or if the operation of the food service establishment otherwise constitutes a substantial hazard to public health. Suspension is effective upon service of the notice required by subsection (2)(b) of this section. When a permit is suspended, food service operations shall immediately cease.

- (b) Whenever a permit is suspended, the holder of the permit or the person in charge shall be notified in writing that the permit is, upon service of the notice, immediately suspended and that an opportunity for hearing will be provided if a written request for hearing is filed with the health officer by the holder of the permit within ten days. If no written request for hearing is filed within ten days, the suspension is sustained.
- (c) Any person whose permit has been suspended, may at any time make application for a reinspection for the purpose of reinstatement of the permit. Within two working days following receipt of a written request for reinspection, including a statement signed by the applicant that in his opinion the conditions causing suspension of the permit have been corrected, the health officer shall make a reinspection. If the applicant is complying with the requirements of these regulations, the permit shall be reinstated.
- (d) If an alternate process for suspension of permits is adopted by a local board of health, it may be used.
 - (3) Revocation of permits:
- (a) The health officer may, after providing opportunity for hearing, revoke a permit for serious or repeated violations of any of the requirements of these regulations, or for interference with the health officer in the performance of duty.
- (b) Prior to revocation, the health officer shall notify, in writing, the holder of the permit, or the person in charge, of the specific reason(s) for which the permit is to be revoked and that the permit shall be revoked at the end of the ten days following service of such notice unless a written request for hearing is filed with the health officer by the holder of the permit within such ten—day period. If no request for hearing is filed within the ten—day period, the revocation of the permit becomes final.
- (c) Any person whose permit has been revoked may make a written application for the purpose of obtaining a new permit. A hearing will be provided before the health officer to determine if a new permit shall be issued.
- (d) If an alternate process for revocation of permits is adopted by a local board of health, it may be used.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–215–149, filed 12/27/90, effective 1/31/91; 80–14–059 (Order 203), § 248–84–070, filed 10/1/80; Regulation 84.070 (part), filed 6/4/63; Rules (part), effective 3/11/60.]

WAC 246-215-159 Service of notices. A notice provided for in these regulations is properly served when it is delivered to the holder of the permit, or the person in charge, or when it is sent by registered or certified mail, return receipt requested, to the last known address of the holder of the permit. A copy of the notice shall be filed in the records of the health officer.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-215-159, filed 12/27/90, effective 1/31/91; 80-14-059 (Order 203), § 248-84-075, filed 10/1/80.]

WAC 246-215-169 Hearings. The hearings provided for in these regulations shall be conducted by the health officer or his/her designee at a time and place designated by him/her. The health officer or designee

shall make a final finding based upon the complete hearing record and shall sustain, modify or rescind any notice or order considered in the hearing. A written report of the hearing decision shall be furnished to the holder of the permit by the health officer or designee. If an alternate hearing process is adopted by a local board of health it may be used.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-215-169, filed 12/27/90, effective 1/31/91; 80-14-059 (Order 203), § 248-84-080, filed 10/1/80.]

- WAC 246-215-179 Inspections. Any inspection of a food service establishment, mobile food unit or temporary food service establishment shall be performed as often as necessary for the enforcement of these regulations.
- (1) Access: The health officer, after proper identification, shall be permitted to enter any food service establishment, mobile food unit or temporary food service establishment, at any reasonable time for the purpose of making inspections to determine compliance with these regulations. The health officer shall be permitted to examine the records of the establishment to obtain information pertaining to food and supplies purchased, received, or used, and to any person employed which is pertinent to an illness investigation or other matters which may affect health or the enforcement of these regulations.
- (2) Report of inspection: Whenever an inspection of a food service establishment, mobile food unit or temporary food service establishment is made, the findings shall be recorded on an inspection report form prepared by the health officer. This inspection report form may be FDA form FD2420 or other inspection report forms specified by the health officer and approved by the department of social and health services. If FDA form FD2420 is used by the health officer, results shall be interpreted in accordance with the 1976 edition of the United States Public Health Service, Food Service Sanitation Manual. A copy of the completed inspection report form shall be furnished to the person in charge of the food service establishment at the conclusion of the inspection. The completed inspection report form shall state specific violations found and establish a specific and reasonable period of time for correction.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–215–179, filed 12/27/90, effective 1/31/91; 80–14–059 (Order 203), § 248–84–085, filed 10/1/80.]

WAC 246-215-189 Examination—Hold orders—Condemnation—Destruction of food. Food may be examined or sampled by the health officer as often as necessary for enforcement of these regulations. The health officer may, upon written notice to the owner or person in charge, place a written hold order on any food which he/she determines or has probable cause to believe to be unwholesome, or otherwise adulterated, mislabeled, contaminated, spoiled, or stored at temperatures not in compliance with these regulations, or from an unapproved source. The health officer shall tag, label, or otherwise identify any food subject to the hold order. No

food subject to a hold order shall be used, served, or moved from the establishment. The health officer shall permit storage of the food under conditions specified in the hold order, unless storage is not possible without risk to the public health, in which case immediate destruction shall be ordered and accomplished. The hold order shall state that a written request for hearing may be filed with the health officer within ten days and that if no hearing is requested and if the health officer does not vacate the hold order, then the food shall be destroyed under supervision of the health officer. On the basis of evidence produced at that hearing, the hold order may be vacated, or the owner or person in charge of the food may be directed by written order to denature or destroy such food or to bring it into compliance with the provisions of these regulations.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-215-189, filed 12/27/90, effective 1/31/91; 80-14-059 (Order 203), § 248-84-090, filed 10/1/80.]

WAC 246-215-199 Review of plans. Properly prepared plans and specifications shall be submitted to the health officer for approval before a food service establishment is constructed or remodeled and whenever an existing structure is converted for use as a food service establishment. The plans and specifications shall indicate the proposed layout; arrangement; mechanical plans; construction materials of work areas; floor, wall and ceiling materials of all areas; the type, make and model of all fixed equipment and facilities.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–215–199, filed 12/27/90, effective 1/31/91; 80–14–059 (Order 203), § 248–84–095, filed 10/1/80.]

WAC 246-215-209 Procedure when infection is suspected. When the health officer suspects that disease transmission by (an) employee(s) of a food service establishment has occurred, the health officer shall take appropriate action to control the transmission of disease including but not limited to any or all of the following:

(1) The securing of a morbidity history of the suspected employee(s);

(2) The immediate exclusion of the employee(s) from employment in food service establishments;

(3) Immediately close the food service establishment concerned until, in the opinion of the health officer, no further danger of disease outbreak exists;

(4) Restrict the employee's services to some area of the establishment where there would be no danger of transmitting disease;

(5) Require adequate medical and laboratory examinations of the employee and of other employees and of his/her or their body discharges to take place;

(6) Require assistance in locating persons exposed to the disease.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-215-209, filed 12/27/90, effective 1/31/91; 80-14-059 (Order 203), § 248-84-100, filed 10/1/80.]

WAC 246-215-219 Variance clause. The health officer, upon written petition of the food service establishment, may grant a variance to any section or sections of these regulations covering physical facilities and equipment standards when no health hazard would exist as a result of this action and the variance is consistent with the intent of these regulations.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–215–219, filed 12/27/90, effective 1/31/91; 80–14–059 (Order 203), § 248–84–105, filed 10/1/80.]

WAC 246-215-229 Interpretation. These regulations shall be enforced by the health officer in accordance with the interpretations contained in the 1976 edition of the United States Public Health Service, Food Service Sanitation Manual, where applicable. When a section of these regulations conflicts with the Food Service Sanitation Manual, these regulations shall apply: Provided, That a local board of health may adopt more stringent regulations.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–215–229, filed 12/27/90, effective 1/31/91; 80–14–059 (Order 203), § 248–84–110, filed 10/1/80.]

WAC 246-215-239 Sulfiting agents. (1) The following definitions apply only to this section:

- (a) "Sulfiting agents" means chemicals used to treat foods to increase shelf life and enhance appearance and include the following:
 - (i) Sulfur dioxide,
 - (ii) Sodium sulfite,
 - (iii) Sodium bisulfite,
 - (iv) Potassium bisulfite,
 - (v) Sodium metabisulfite, and
 - (vi) Potassium metabisulfite.
- (b) "Health officer" means the local health officer or designee or the director of the division of health, department of social and health services, or designee.
- (2) Sulfiting agents shall not be applied in any food service establishment and are prohibited from the premises of any food service establishment unless in package form, clearly labeled, and offered for retail sale.
- (3) Consumers shall be notified by any food service establishment purchasing, using, offering for sale or service, or otherwise having on the establishment's premises or in storage, any foods processed by a commercial food processing establishment by one of the following methods:
- (a) The following notice or similar notice approved by the health officer conspicuously attached to any and all packages and bulk food display units:

"This food contains sulfiting agents. Persons allergic to sulfiting agents should avoid consumption of this food."

or,

(b) Conspicuous notices on public entrances, or on menus, or on table placards, stating in the following language or similar language approved by the health officer:

"Sulfiting agents may be used on some foods served or sold by this establishment. Persons allergic to sulfiting agents should ask for additional information."

(4) Food service establishments shall comply with subsection (3) of this section by August 15, 1985.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–215–239, filed 12/27/90, effective 1/31/91; 85–11–024 (Order 288), § 248–84–120, filed 5/13/85.]

WAC 246-215-500 Separability clause. Should any section, paragraph, clause or phrase of these rules and regulations be declared unconstitutional or invalid for any reason, the remainder of said rules and regulations shall not be affected thereby.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as \$246-215-500, filed 12/27/90, effective 1/31/91; 80-14-059 (Order 203), \$248-84-500, filed 10/1/80.]

WAC 246-215-900 Penalty clause. Any person violating, or refusing or neglecting to comply with these regulations, and upon conviction, shall be guilty of a misdemeanor pursuant to RCW 70.05.120.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-215-900, filed 12/27/90, effective 1/31/91; 80-14-059 (Order 203), § 248-84-900, filed 10/1/80.]

Chapter 246-217 WAC FOOD WORKER PERMITS

of health.

WAC	
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WAC 246-217-001 Objective. For the purpose of preventing the spread of infectious diseases and attaining a uniform sanitary standard in the state, it is deemed essential to require all food workers in the state to demonstrate through the process of an examination that they possess an adequate knowledge of the sanitary principles and practices involved in the preparation, storage, and service of foods and beverages, and in the handling of related equipment and facilities by extending the provisions of chapter 197, Laws of 1957, and (chapter 248-86 WAC), to all such workers.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–217–001, filed 12/27/90, effective 1/31/91; Regulation .87.001, effective 3/11/60.]

WAC 246-217-002 Legal authority of the state board of health. RCW 69.06.010 and 69.06.020. See also RCW 43.20.050.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-217-002, filed 12/27/90, effective 1/31/91; Regulation .86.999, effective 3/11/60.]

WAC 246-217-010 Definitions. As used in this chapter of the rules and regulations, the following definitions shall apply: (1) A "food service worker" shall mean a person engaged in a food and/or beverage establishment and who may contribute to the transmission

of infectious diseases through the nature of his contact with food products and/or equipment and facilities. This shall not include persons engaged in food handling operations where the products are sterilized after packaging or in the processing of frozen fruits or vegetables, nor nonsupervisory personnel assisting with food services functions of churches, lodges, granges and similar organizations when such are exempted from collected retail sales tax by rule 169 of the tax commission of the state of Washington as effective May 1, 1935.

(2) The term "food establishment" shall include, but is not limited to, all food handling operations associated with school lunches, carnivals, circuses, intrastate ferries, state institutions, bakeries, shellfish processing plants, caterers, hospitals, nursing homes, maternity homes, boarding homes, child care agencies, churches, lodges, granges, clubs, and food demonstrations.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–217–010, filed 12/27/90, effective 1/31/91; Regulation .87.002, effective 3/11/60.]

WAC 246-217-011 Definitions. Definitions as used in this chapter of the rules and regulations and in chapter 197, Laws of 1957, (chapter 69.06 RCW) –

(1) "Act" or "this act" means chapter 197, Laws of 1957, (chapter 69.06 RCW).

(2) "Person" means any individual, firm, partnership, corporation, company, association, or joint stock association, and the legal successor thereof.

(3) "Director" means the state director of health.

(4) "Department" means the state department of health.

(5) "Jurisdictional health department" refers to one of the following:

(a) Local health district as defined in chapter 70.46 RCW.

(b) City-county health department as defined in chapter 70.08 RCW.

(c) City health department as defined in chapter 70-.04 RCW.

(d) County health department as defined in chapter 70.06 RCW.

(6) All other words and designations shall have the meaning as set forth in WAC 248-100-001.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–217–011, filed 12/27/90, effective 1/31/91; Regulation .86.001, effective 3/11/60.]

WAC 246-217-020 Communicable disease. It shall be unlawful and a violation of these regulations for any person with a communicable disease in the infectious state or a known carrier of a communicable disease or infectious condition to handle, prepare, serve or sell food, food products, or beverages for public consumption and it shall be unlawful and a violation of these regulations for any person to knowingly employ such person so afflicted.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-217-020, filed 12/27/90, effective 1/31/91; Regulation .87.020, effective 3/11/60.]

- WAC 246-217-030 Form of permits—Fees. (1) All permits required by this act shall be issued by the jurisdictional health department and signed by the local health officer or his authorized representative.
- (2) All applicants for a permit or renewal of a permit shall pay to the jurisdictional health department a fee in the amount of five dollars. Such fee shall be used by the jurisdictional health department to defray the expenses arising out of the administration of this act.
- (3) The permit shall conform to the following specifications:
- (a) The permit shall be six inches by five inches in size and shall consist of two sections titled as follows:
 - (i) Food and beverage service worker's permit, and
 - (ii) Food and beverage service worker's health record.
- (b) The permit is given to the worker and the health record is kept on file in the health department.
- (4) The permit shall contain the following information:
 - (a) Number of the permit;
 - (b) Signature of the worker;
 - (c) Occupation;
 - (d) Home address;
- (e) The statement, "THIS CERTIFIES THAT has satisfied the requirements of chapter 197, Laws of 1957, and the state board of health for issuance of permit";
 - (f) Manual chapters covered in test shall be noted;
 - (g) Permit expiration date; and
 - (h) Signature of health officer.
- (5) On the reverse side of the permit there shall be noted the following:
 - "Please note: This card is valid only to the employee whose signature appears on the reverse side. It must be filed at place of employment and shown upon request to sanitarian, health officer, or deputy.

INSTRUCTIONS GOVERNING PERSONAL HYGIENE AND SANITATION

- 1. Do not work if you are ill with a "catching" sickness, such as sore throat, common cold, diarrhea, or other contagious disease.
- Notify the health department if you, any person in your home, or your place of business has a contagious disease or a disease suspected of being contagious.
- Keep your hands and fingernails clean. Wash your hands frequently, particularly every time after going to the toilet, blowing the nose, or handling soiled objects.
- 4. Use disposal tissue for blowing the nose or spitting. Spitting can be a dangerous habit.
- 5. Do not pick pimples, boils, or your nose. This is a dangerous source of infection. If you have sores of this kind, keep them covered with a dressing.

- Handle foods with your fingers as little as possible.
 Use utensils whenever you can, as in picking up butter, etc.
- Avoid handling rims of glasses, cups, soup bowls, and eating surfaces of silver.
- Protect food by keeping it covered from flies, keeping perishable foods and cream-filled pastries properly refrigerated."
- (6) The food and beverage service worker's health record shall contain the following information:
 - (a) Date issued;
 - (b) Number;
 - (c) Name;
 - (d) Age;
 - (e) Sex;
 - (f) Home address;
 - (g) Occupation;
 - (h) Where employed;
 - (i) City;

 - (1) Laboratory examinations, x-rays, or skin tests:
 - (i) Test
 Result
 Date

 (ii) Test
 Result
 Date
 - (iii) Test Result _____ Date ____
 - (m) Manual chapters covered in test shall be noted.
- (7) The reverse side of the health record shall contain: "Follow-up remarks."

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–217–030, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 69.06 RCW. 87–19–069 (Order 346), § 248–86–010, filed 9/16/87; Regulation .86.010, effective 3/11/60.]

WAC 246-217-040 Requirements for permits. (1) The local health officer shall furnish to applicant for a permit or renewal of permit a copy of the latest edition of the "Food and Beverage Service Workers' Manual," as prepared by the department and approved by the director.

(2) In order to qualify for issuance of a permit or renewal of a permit, the applicant shall demonstrate his knowledge of elementary acceptable practices in the sanitary preparation, service, and storage of food and beverages, and the proper sanitation of equipment and facilities, by satisfactorily completing an examination conducted by the local health officer or his authorized representative on such subjects, based on the practices and procedures set forth in the "Food and Beverage Service Workers' Manual."

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-217-040, filed 12/27/90, effective 1/31/91; Regulation .86.020, effective 3/11/60.]

WAC 246-217-050 Examination may be required. Whenever, in the judgment of the director or any local health officer, circumstances indicate the necessity, specified persons engaged in the preparation, service, or sale of food or unbottled beverages for public consumption shall, upon request of such public health officials and at no additional charge to such persons, submit to examination by the local health officer, or a legally qualified physician designated by him for the purpose of

determining the presence of a communicable disease or infection.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-217-050, filed 12/27/90, effective 1/31/91; Regulation .86.040, effective 3/11/60.]

WAC 246-217-060 Revocation of permit. The food and beverage service workers' permit may be revoked by the local health officer, or by the director, upon evidence indicating repeated or continuing violations of accepted procedures and practices in the preparation, service, or storage of food or beverage offered for public consumption, or upon demonstration of the presence of a communicable disease in the infectious state, or an infectious condition of potential hazard to the public or to the persons' co-workers, or for falsification of information required for issuance of the permit.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-217-060, filed 12/27/90, effective 1/31/91; Regulation .86.050, effective 3/11/60.]

WAC 246-217-070 Right of appeal. Any food or beverage service worker whose permit has been revoked by a local health officer, or the director, may appeal to the local board of health, or the state board of health in the event such revocation is by the director, for review of the findings. Such appeal must be in writing and must be filed with the appropriate board of health within ten days of revocation of the worker's permit. While such appeal is pending, the revocation of the worker's permit shall be stayed until such time as the appropriate board of health has reviewed the findings and entered its decision.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-217-070, filed 12/27/90, effective 1/31/91; Regulation .86.060, effective 3/11/60.]

Chapter 246-220 WAC RADIATION PROTECTION-GENERAL PROVISIONS

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WAC 246-220-001 Authority. Rules and regulations set forth herein are adopted pursuant to the provisions of chapter 70.98 RCW.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–220–001, filed 12/27/90, effective 1/31/91; Order 1095, § 402–12–010, filed 2/6/76; Order 1, § 402–12–010, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-220-002 Purpose. It is the purpose of these regulations to state such requirements as shall be applied to the use of all radiation, radiation machines, and radioactive materials to ensure the maximum protection of the public health and the maximum safety to all persons at, or in the vicinity of, the place of use, storage, or disposal thereof. These regulations are intended to be consistent with the best use of radiation machines and radioactive materials.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–220–002, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–12–030, filed 12/11/86; Order 1095, § 402–12–030, filed 2/6/76; Order 1, § 402–12–030, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-220-003 Scope. Except as otherwise specifically provided, these regulations apply to all persons who receive, possess, use, transfer, own or acquire any source of radiation, provided, however, that nothing in these regulations shall apply to any person to the extent such person is subject to regulation by the U.S. Nuclear Regulatory Commission.*

Note: *Attention is directed to the fact that regulation by the state of source material, by-product material, and special nuclear material in quantities not sufficient to form a critical mass is subject to the provisions of the agreement between the state and the U.S. Nuclear Regulatory Commission and to Part 150 of the commission's regulations (10 CFR Part 150).

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-220-003, filed 12/27/90, effective 1/31/91; Order 1095, § 402-12-040, filed 2/6/76; Order 1, § 402-12-040, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-220-007 Statement of philosophy. In accordance with the recommendations of the Environmental Protection Agency, formerly the Federal Radiation Council, approved by the president of the United States of America, persons engaged in activities under licenses issued by the Washington state department of social and health services pursuant to the Atomic Energy Act of 1954, as amended, shall, in addition to complying with the requirements set forth in chapter 402-24 WAC, make every reasonable effort to maintain radiation exposures, and releases of radioactive materials in effluents to unrestricted areas, as low as is reasonably achievable. Such persons should make particular efforts to keep the radiation exposure of an embryo or fetus as low as is reasonably achievable during the entire gestation period as recommended by the National Council on Radiation Protection and Measurements. The term "as low as is reasonably achievable" means as low as is readily achievable taking into account the state of technology, and the economics of improvements in relation to benefits to the public health and safety and in relation to the utilization of nuclear energy, ionizing radiation, and radioactive materials in the public interest.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-220-007, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-10-010, filed 12/8/80; Order 1095, § 402-10-010, filed 2/6/76.]

- WAC 246-220-010 Definitions. As used in these regulations, these terms have the definitions set forth below. Additional definitions used only in a certain part will be found in that part.
- (1) " A_1 " means the maximum activity of special form radioactive material permitted to be transported in a Type A package. " A_2 " means the maximum activity of normal form radioactive material permitted to be transported in a Type A package. A_1 and A_2 values are assigned to individual radionuclides and are tabulated in Appendix A of WAC 402–12–200. Methods of calculating values are also given.
- (2) "Accelerator produced material" means any material made radioactive by exposing it in a particle accelerator.
- (3) "Act" means Nuclear energy and radiation, chapter 70.98 RCW.
- (4) "Agreement state" means any state with which the United States Nuclear Regulatory Commission has entered into an effective agreement under section 274 b. of the Atomic Energy Act of 1954, as amended (73 Stat. 689).
- (5) "Airborne radioactive material" means any radioactive material dispersed in the air in the form of dusts, fumes, mists, vapors, or gases.
- (6) "Airborne radioactivity area" means (a) any room, enclosure, or operating area in which airborne radioactive material exists in concentrations in excess of the amounts specified in Appendix A, Table I, Column 1 of chapter 402–24 WAC; or (b) any room, enclosure, or operating area in which airborne radioactive material exists in concentrations which, averaged over the number of hours in any week during which individuals are in the area, exceed twenty-five percent of the amounts specified in WAC 402–24–220, Appendix A, Table I, Column 1.
- (7) "Byproduct material" means: (a) Any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material, and (b) the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content.
- (8) "Calendar quarter" means not less than twelve consecutive weeks nor more than fourteen consecutive weeks. The first calendar quarter of each year shall begin in January and subsequent calendar quarters shall be so arranged such that no day is included in more than one calendar quarter and no day in any one year is omitted from inclusion within a calendar quarter. No licensee or registrant shall change the method of determining calendar quarters for purposes of these regulations except at the beginning of a calendar year.
 - (9) "CFR" means Code of Federal Regulations.
 - (10) "Controlled area." See "Restricted area."

- (11) "Curie" means a unit of measurement of radioactivity. One curie (Ci) is that quantity of radioactive material which decays at the rate of 3.7×10^{10} transformations per second (tps). Commonly used submultiples of the curie are the millicurie and the microcurie. One millicurie (mCi) = 0.001 curie = 3.7×10^7 tps. (Formerly referred to as disintegrations per seconds or dps.) One microcurie (uCi) = 0.000001 curie = 3.7×10^4 tps. One picocurie (pCi) = 10^{-12} Ci. One nanocurie (nCi) = 10^{-9} Ci. One tps = 60 dpm.
- (12) "Department" means the department of social and health services, office of radiation protection, which has been designated as the state radiation control agency.
- (13) "Depleted uranium" means the source material uranium in which the isotope Uranium-235 is less than 0.711 percent by weight of the total uranium present. Depleted uranium does not include special nuclear material.
- (14) "dpm" means disintegrations per minute. See also "curie."
- (15) "Dose" as used in these regulations shall mean absorbed dose or dose equivalent as appropriate.
- (a) "Absorbed dose" is the energy imparted to matter by ionizing radiation per unit mass of irradiated material at the place of interest. The special unit of absorbed dose is the rad. (See rad.)
- (b) "Dose equivalent" is a quantity that expresses on a common scale for all radiation a measure of the postulated effect on a given organ. It is defined as the absorbed dose in rads times certain modifying factors. The unit of dose equivalent is the rem. (See rem.)
- (16) "Dose commitment" means the total radiation dose to a part of the body that will result from retention in the body of radioactive material. For purposes of estimating the dose commitment, it is assumed that from the time of intake the period of exposure to retained material will not exceed fifty years.
- (17) "Exposure" means the quotient of dQ by dm where "dQ" is the absolute value of the total charge of the ions of one sign produced in air when all the electrons (negatrons and positrons) liberated by photons in a volume element of air having "dm" are completely stopped in air. (The special unit of exposure is the roentgen (R).)*

Note: *When not underlined as above the term 'exposure' has a more general meaning in these regulations.

- (18) "Exposure rate" means the exposure per unit of time, such as R/min., mR/h, etc.
- (19) "Former United States Atomic Energy Commission (AEC) or United States Nuclear Regulatory Commission (NRC) licensed facilities" means nuclear reactors, nuclear fuel reprocessing plants, uranium enrichment plants, or critical mass experimental facilities where AEC or NRC licenses have been terminated.
- (20) "Healing arts" means the disciplines of medicine, dentistry, osteopathy, chiropractic, podiatry, and veterinary medicine.
- (21) "High radiation area" means any area, accessible to individuals, in which there exists radiation at such

levels that a major portion of the body could receive in any one hour a dose in excess of 100 millirems.

- (22) "Highway route controlled quantity" means a quantity of radioactive material in a single package which exceeds:
- (a) 3,000 times the A_1 or A_2 quantity as appropriate; or
 - (b) 30,000 curies, whichever is least.
- (23) "Human use" means the intentional internal or external administration of radiation or radioactive material to human beings.
- (24) "IND" means investigatory new drug for which an exemption has been claimed under the United States Food, Drug and Cosmetic Act (Title 10 CFR).
 - (25) "Individual" means any human being.
- (26) "Inspection" means an official examination or observation by the department including but not limited to, tests, surveys, and monitoring to determine compliance with rules, regulations, orders, requirements and conditions of the department.
- (27) "Irretrievable source" means any sealed source containing licensed material which is pulled off or not connected to the wireline downhole and for which all reasonable effort at recovery, as determined by the department, has been expended.
- (28) "License" means a license issued by the department in accordance with the regulations adopted by the department.
- (29) "Licensee" means any person who is licensed by the department in accordance with these regulations and the act.
- (30) "Licensing state" means any state with regulations equivalent to the suggested state regulations for control of radiation relating to, and an effective program for, the regulatory control of NARM.
- (31) "NARM" means any naturally occurring or accelerator-produced radioactive material except source material.
- (32) "Natural radioactivity" means radioactivity of naturally occurring nuclides.
- (33) "NDA" means a new drug application which has been submitted to the United States Food and Drug Administration.
- (34) "Normal form radioactive material" means radioactive material which has not been demonstrated to qualify as "special form radioactive material."
- (35) "Nuclear waste" as used in WAC 402-19-500(5) means any quantity of source or byproduct material, (not including radiography sources being returned to the manufacturer) required to be in Type B packaging while transported to, through, or across state boundaries to a disposal site, or to a collection point for transport to a disposal site. Nuclear waste, as used in these regulations, is a special classification of radioactive waste.
- (36) "Occupational dose" means exposure of an individual to radiation in a restricted area; or in the course of employment in which the individual's duties involve exposure to radiation: *Provided*, That occupational dose

- shall not be deemed to include any exposure of an individual to radiation for the purpose of diagnosis or therapy of such individual.
- (37) "Ore refineries" means all processors of a radioactive material ore.
- (38) "Particle accelerator" means any machine capable of accelerating electrons, protons, deuterons, or other charged particles in a vacuum and of discharging the resultant particulate or other radiation into a medium at energies usually in excess of 1 MeV.
- (39) "Permittee" means a person who has applied for, and received, a valid site use permit for use of the low-level waste disposal facility at Hanford, Washington.
- (40) "Person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, agency, political subdivision of this state, any other state or political subdivision or agency thereof, and any legal successor, representative, agent or agency of the foregoing.
- (41) "Personal supervision" means supervision such that the supervisor is physically present at the facility and in such proximity that contact can be maintained and immediate assistance given as required.
- (42) "Personnel monitoring equipment" means devices (e.g., film badges, pocket dosimeters, and thermoluminescent dosimeters) designed to be worn or carried by an individual for the purpose of estimating the dose received by the individual.
- (43) "Pharmacist" means an individual licensed by this state to compound and dispense drugs, and poisons.
- (44) "Physician" means an individual licensed by this state to prescribe and dispense drugs in the practice of medicine.
- (45) "Practitioner" means an individual licensed by the state in the practice of a healing art (i.e., physician, dentist, podiatrist, chiropractor, etc.).
- (46) "Qualified expert" means an individual who has demonstrated to the satisfaction of the department possession of knowledge and training to measure ionizing radiation, to evaluate safety techniques, and to advise regarding radiation protection needs. The department reserves the right to recognize the qualifications of an individual in specific areas of radiation protection.
- (47) "Rad" means the special unit of absorbed dose. One rad equals one-hundredth of a joule per kilogram of material; for example, if tissue is the material of interest, then 1 rad equals 100 ergs per gram of tissue.
- (48) "Radiation" means ionizing radiation, i.e., gamma rays and x-rays, alpha and beta particles, high speed electrons, and other nuclear particles.
- (49) "Radiation area" means any area, accessible to individuals, in which there exists radiation at such levels that a major portion of the body could receive in any one hour a dose in excess of 5 millirems, or in any five consecutive days a dose in excess of 100 millirems.
- (50) "Radiation machine" means any device capable of producing ionizing radiation except those which produce radiation only from radioactive material.
- (51) "Radiation safety officer" means one who has the knowledge, authority, and responsibility to apply appropriate radiation protection regulations and measures.

- (52) "Radiation source." See "Source of radiation."
- (53) "Radioactive material" means any material (solid, liquid, or gas) which emits radiation spontaneously.
- (54) "Radioactive waste" means any radioactive material which is no longer of use and intended for disposal or treatment for the purposes of disposal.
- (55) "Radioactivity" means the transformation of unstable atomic nuclei by the emission of radiation.
- (56) "Registrable item" means any radiation machine except those exempted by RCW 70.98.180 or exempted by the department pursuant to the authority of RCW 70.98.080.
- (57) "Registrant" means any person who is registered by the department in accordance with these regulations and the act.
- (58) "Registration" means registration with the department in accordance with the regulations adopted by the department.
- (59) "Regulations of the United States Department of Transportation" means the regulations in 49 CFR Parts 170–189, 14 CFR Part 103, and 46 CFR Part 146.
- (60) "Rem" means a measure of the dose of any radiation to body tissue in terms of its estimated biological effect relative to a dose received from an exposure to one roentgen (R) of x-rays. (One millirem (mrem) = 0.001 rem.) For the purpose of these regulations, any of the following is considered to be equivalent to a dose of one rem:
 - (a) An exposure of 1 R of x, or gamma radiation;
- (b) A dose of 1 rad due to x, gamma, or beta radiation;
- (c) A dose of 0.05 rad due to particles heavier than protons and with sufficient energy to reach the lens of the eye;
- (d) A dose of 0.1 rad due to neutrons or high energy protons.*
 - (e) A dose of 0.4 rad due to thermal neutrons.

Note: *If it is more convenient to measure the neutron flux, or equivalent, than to determine the neutron absorbed dose in rads, one rem of neutron radiation may, for purposes of these regulations, be assumed to be equivalent to fourteen million neutrons per square centimeter incident upon the body; or, if there exists sufficient information to estimate with reasonable accuracy the approximate distribution in energy of the neutrons, the incident number of neutrons per square centimeter equivalent to one rem may be estimated from the following table:

Neutron Flux Dose Equivalents

Neutron energy (MeV)	Number of neutrons per square centi- meter for a dose equivalent of 1 rem (neutrons/cm ²)	Average flux density to deliver 100 millirems in 40 hours (neutrons/cm ² per second)
Thermal	970 x 10 ⁶	670
0.0001	720×10^6	500
0.005	820 x 10 ⁶	570
0.02	400×10^6	280
0.1	120 x 10 ⁶	80
0.5	43×10^6	30
1.0	26 x 10 ⁶	18

Neutron energy (MeV)	Number of neutrons per square centi- meter for a dose equivalent of 1 rem (neutrons/cm ²)	Average flux density to deliver 100 millirems in 40 hours (neutrons/cm² per second)
2.5	29 x 10 ⁶	20
5.0	26×10^6	18
7.5	24×10^6	17
10.0	24 x 10 ⁶	17
10 to 30	14 x 10 ⁶	10

- (61) "Research and development" means: (a) Theoretical analysis, exploration, or experimentation; or (b) the extension of investigative findings and theories of a scientific or technical nature into practical application for experimental and demonstration purposes, including the experimental production and testing of models, devices, equipment, materials, and processes. Research and development does not include the internal or external administration of radiation or radioactive material to human beings.
- (62) "Restricted area" (controlled area) means any area the access to which is controlled by the licensee or registrant for purposes of protection of individuals from exposure to radiation and radioactive material. "Restricted area" shall not include any areas used for residential quarters, although a separate room or rooms in a residential building may be set apart as a restricted area.
- (63) "Roentgen" (R) means the special unit of exposure. One roentgen equals 2.58 x 10⁻⁴ coulombs/kilogram of air (see "Exposure").
- (64) "Sealed source" means radioactive material that is permanently bonded or fixed in a capsule or matrix designed to prevent release and dispersal of the radioactive material under the most severe conditions which are likely to be encountered in normal use and handling.
- (65) "Source material" means: (a) Uranium or thorium, or any combination thereof, in any physical or chemical form, or (b) ores which contain by weight one—twentieth of one percent (0.05 percent) or more of (i) uranium, (ii) thorium, or (iii) any combination thereof. Source material does not include special nuclear material.
- (66) "Source of radiation" means any radioactive material, or any device or equipment emitting or capable of producing ionizing radiation.
- (67) "Source container" means a device in which radioactive material is transported or stored.
- (68) "Source material milling" means any activity that results in the production of byproduct material as defined in subsection (7)(b) of this section.
- (69) "Special form radioactive material" means radioactive material which satisfies the following conditions:
- (a) It is either a single solid piece or is contained in a sealed capsule that can only be opened by destroying the capsule;
- (b) The piece or capsule has at least one dimension not less than five millimeters (0.197 inch); and
 - (c) It satisfies the test requirements of 10 CFR 71.75.

(70) "Special nuclear material in quantities not sufficient to form a critical mass" means uranium enriched in the isotope U-235 in quantities not exceeding three hundred fifty grams of contained U-235; Uranium-233 in quantities not exceeding two hundred grams; Plutonium in quantities not exceeding two hundred grams; or any combination of them in accordance with the following formula: For each kind of special nuclear material, determine the ratio between the quantity of that special nuclear material and the quantity specified above for the same kind of special nuclear material. The sum of such ratios for all of the kinds of special nuclear material in combination shall not exceed "1" (i.e., unity). For example, the following quantities in combination would not exceed the limitation and are within the formula:

$\frac{175(\text{grams contained U-235})}{350} + \frac{50(\text{grams U-233})}{200} + \frac{50(\text{grams Pu})}{200} < 1$

- (71) "State" as used in WAC 402-19-500(5) means the several states of the union, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Trust Territory of the Pacific Islands, and the Commonwealth of the Northern Mariana Islands.
- (72) "Survey" means an evaluation of the production, use, release, disposal, and/or presence of sources of radiation under a specific set of conditions to determine actual or potential radiation hazards. When appropriate, such evaluation includes, but is not limited to, tests, physical examinations and measurements of levels of radiation or concentration of radioactive material present.
- (73) "Test" means a method for determining the characteristics or condition of sources of radiation or components thereof.
- (74) "These regulations" mean all parts of the rules for radiation protection of the state of Washington.
- (75) "Type A packaging" means packaging designed to retain its integral containment and shielding under normal conditions of transport as demonstrated by tests described in 49 CFR 173.465 or 173.466 as appropriate. The contents are limited to A_1 or A_2 quantities. The package does not require competent authority approval.
- (76) "Type A quantity" means a quantity of radioactive material less than the A_1 or A_2 value for a single radionuclide, or for which the sum of the fractions does not exceed unity for a mixture of radionuclides.
- (77) "Type B packaging" means packaging approved by the United States nuclear regulatory commission for the transport of quantities of radioactivity in excess of A_1 or A_2 . It is defined in detail in 10 CFR 71.4.
- (78) "Type B quantity" means a quantity of radioactive material in excess of a Type A quantity. It requires Type B packaging for transportation.
 - (79) "Uncontrolled area." See "Unrestricted area."

- (80) "United States Department of Energy" means the Department of Energy established by Public Law 95-91, August 4, 1977, 91 Stat. 565, 42 U.S.C. 7101 et seq., to the extent that the department exercises functions formerly vested in the United States Atomic Energy Commission, its chairman, members, officers and components and transferred to the United States Energy Research and Development Administration and to the administrator thereof pursuant to sections 104 (b), (c) and (d) of the Energy Reorganization Act of 1974 (Public Law 93-438, October 11, 1974, 88 Stat. 1233 at 1237, effective January 19, 1975) and retransferred to the Secretary of Energy pursuant to section 301(a) of the Department of Energy Organization Act (Public Law 95-91, August 4, 1977, 91 Stat. 565 at 577-578, 42 U.S.C. 7151, effective October 1, 1977).
- (81) "Unrefined and unprocessed ore" means ore in its natural form prior to any processing, such as grinding, roasting, beneficiating, or refining.
- (82) "Unrestricted area" (uncontrolled area) means any area access to which is not controlled by the licensee or registrant for purposes of protection of individuals from exposure to radiation and radioactive material, and any area used for residential quarters.
- (83) "Waste handling licensees" mean persons licensed to receive and store radioactive wastes prior to disposal and/or persons licensed to dispose of radioactive waste
- (84) "Worker" means an individual engaged in work under a license or registration issued by the department and controlled by a licensee or registrant, but does not include the licensee or registrant. If students of age eighteen years or older are subjected routinely to work involving radiation, then the students are considered to be occupational workers. Individuals of less than eighteen years of age shall meet the requirements of WAC 402–24–035.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–220–010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–12–050, filed 12/11/86; 83–19–050 (Order 2026), § 402–12–050, filed 9/16/83. Statutory Authority: Chapter 70.121 RCW. 81–16–031 (Order 1683), § 402–12–050, filed 7/28/81. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–12–050, filed 12/8/80; Order 1095, § 402–12–050, filed 2/6/76; Order 708, § 402–12–050, filed 8/24/72; Order 1, § 402–12–050, filed 7/2/71; Order 1, § 402–12–050, filed 1/8/69; Rules (part), filed 10/26/66.]

- WAC 246-220-020 Records. (1) Each licensee or registrant shall maintain records relating to the receipt, use, storage, transfer, or disposal of radiation sources, and such other records as the department may require which will permit the determination of the extent of occupational and public exposure from such radiation sources. Copies of these records shall be submitted to the department on request. These requirements are subject to such exemptions as may be provided by department rules.
- (2) In accordance with the Public Disclosure Act, the department shall make available to each licensee and/or registrant departmental records pertaining to that licensee or registrant, at his/her written request.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–220–020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–12–080, filed 12/8/80; Order 1095, § 402–12–080, filed 2/6/76; Order 1, § 402–12–080, filed 1/8/69; Rules (part), filed 10/26/66.]

- WAC 246-220-030 Inspections. (1) Each licensee and/or registrant shall afford the department at all reasonable times opportunity to inspect sources of radiation and the premises and facilities wherein such sources of radiation are used or stored.
- (2) Each licensee and/or registrant shall make available to the department for inspection, upon reasonable notice, records maintained pursuant to these regulations.
- (3) In accordance with the Public Disclosure Act, the department shall make available to each licensee and/or registrant a copy of every inspection report written which covers any inspection of the licensee's and/or registrant's source of radiation, records, premises, or facilities. Copies of these inspection records shall be submitted to the licensee or registrant by the department upon the receipt of the written request of the licensee and/or registrant.
- (4) Any person who resists, impedes, or in any manner interferes with, any individual who performs inspections which are related to any activity or facility registration/license issued by the department is subject to immediate license and/or registration certificate revocation as well as applicable civil and criminal penalties.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–220–030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–12–090, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–12–090, filed 12/8/80; Order 1095, § 402–12–090, filed 2/6/76; Order 1, § 402–12–090, filed 1/8/69; Rules (part), filed 10/26/66.]

- WAC 246-220-040 Tests and surveys. (1) Each licensee and registrant shall perform upon instructions from the department or shall permit the department to perform such reasonable tests and surveys as the department deems appropriate or necessary including, but not limited to, tests and surveys of:
 - (a) Sources of radiation;
- (b) Facilities wherein sources of radiation are used or stored;
- (c) Radiation detection and monitoring instruments; and
- (d) Other equipment and devices used in connection with utilization or storage of licensed or registered sources of radiation.
- (2) In accordance with the Public Disclosure Act, the department shall provide to the licensee and/or registrant copies of all tests and surveys conducted on the licensee's and/or registrant's sources of radiation, upon written request of the licensee and/or registrant. The department shall acknowledge the receipt of the request in a timely manner by telephone or letter.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \$246-220-040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), \$402-12-100, filed 12/8/80; Order 1095, \$402-12-100, filed 2/6/76; Order 1, \$402-12-100, filed 1/8/69; Rules (part), filed 10/26/66.]

- WAC 246-220-050 Exemptions. (1) The department may, upon application therefor or upon its own initiative, grant such exemptions or exceptions from the requirements of these regulations as it determines are authorized by law and will not result in undue hazard to public health and safety or property.
- (2) Any U.S. Department of Energy contractor or subcontractor and any U.S. Nuclear Regulatory Commission contractor or subcontractor of the following categories operating within this state is exempt from these regulations to the extent that such contractor or subcontractor under his contract receives, possesses, uses, transfers or acquires sources of radiation:
- (a) Prime contractors performing work for the Department of Energy at U.S. government—owned or controlled sites, including the transportation of sources of radiation to or from such sites and the performance of contract services during temporary interruptions of such transportation;
- (b) Prime contractors of the Department of Energy performing research in, or development, manufacture, storage, testing or transportation of, atomic weapons or components thereof;
- (c) Prime contractors of the Department of Energy using or operating nuclear reactors or other nuclear devices in a United States government—owned vehicle or vessel; and
- (d) Any other prime contractor or subcontractor of the Department of Energy or of the Nuclear Regulatory Commission when the state and the Nuclear Regulatory Commission jointly determine (i) that the exemption of the prime contractor or subcontractor is authorized by law, and (ii) that under the terms of the contract or subcontract, there is adequate assurance that the work thereunder can be accomplished without undue risk to the public health and safety.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–220–050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–12–125, filed 12/8/80; Order 1095, § 402–12–125, filed 2/6/76.]

WAC 246-220-060 Violations. An injunction or other court order may be obtained prohibiting any violation of any provision of the act or any regulation or order issued thereunder. Any person who violates any provision of the act or any regulation or order issued thereunder may be guilty of a gross misdemeanor and upon conviction, may be punished by fine or imprisonment or both, as provided by law.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-220-060, filed 12/27/90, effective 1/31/91; Order 1095, § 402-12-130, filed 2/6/76; Order 1, § 402-12-130, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-220-070 Impounding. Sources of radiation shall be subject to impoundment pursuant to RCW 70.98.160.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–220–070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–12–140, filed 12/11/86; Order 1095, § 402–12–140, filed 2/6/76; Order 1, § 402–12–140, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-220-080 Prohibited uses. (1) Hand-held fluoroscopic screens shall not be used.

- (2) Shoe-fitting fluoroscopic devices shall not be used. [Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-220-080, filed 12/27/90, effective 1/31/91; Order 1095, § 402-12-150, filed 2/6/76.]
- WAC 246-220-090 Communications. All communications and reports concerning these regulations, and applications filed thereunder, should be addressed to the Department of Social and Health Services, Radiation Control Section, Mailstop LF-13, Olympia, Washington 98504. The emergency telephone number in Seattle, is 206-682-5327 or 206 (NUCLEAR).

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \$246-220-090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), \$402-12-160, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), \$402-12-160, filed 12/8/80; Order 1095, \$402-12-160, filed 2/6/76.]

WAC 246-220-100 Additional requirements. The department may, by rule, regulation, or order, impose upon any licensee or registrant such requirements in addition to those established in these regulations as it deems appropriate or necessary to minimize danger to public health and safety or property.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \$246-220-100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), \$402-12-170, filed 12/8/80; Order 1095, \$402-12-170, filed 2/6/76.]

WAC 246-220-110 Appendix A--Determination of A_1 and A_2 values. I. Single radionuclides.

- (1) For a single radionuclide of known identity, the values of A_1 and A_2 are taken from Table A-1 if listed there. The values A_1 and A_2 in Table A-1 are also applicable for radionuclides contained in (α, n) or (γ, n) neutron sources.
- (2) For any single radionuclide whose identity is known but which is not listed in Table A-1, the values of A_1 and A_2 are determined according to the following procedure:
- (a) If the radionuclide emits only one type of radiation, A_1 is determined according to the rules in paragraphs (i), (ii), (iii) and (iv) of this paragraph. For radionuclides emitting different kinds of radiation, A_1 is the most restrictive value of those determined for each kind of radiation. However, in both cases, A_1 is restricted to a maximum of 1000 Ci. If a parent nuclide decays into a shorter lived daughter with a half-life not greater than 10 days, A_1 is calculated for both the parent and the daughter, and the more limiting of the two values is assigned to the parent nuclide.

(i) For gamma emitters, A₁ is determined by the expression:

$$A_1 = - \text{ curies}$$

$$GRC$$

where GRC is the gamma-ray constant, corresponding to the dose in R/h at 1 m per Ci; the number 9 results from the choice of 1 rem/h at a distance of 3 m as the reference dose-equivalent rate.

(ii) For X-ray emitters, A_1 is determined by the atomic number of the nuclide:

for $Z < 55-A_1=1000 \text{ Ci}$

for $Z > 55-A_1=200 \text{ Ci}$

where Z is the atomic number of the nuclide.

- (iii) For beta emitters, A_1 is determined by the maximum beta energy (E_{max}) according to Table A-2;
- (iv) For alpha emitters, A_1 is determined by the expression:

 $A_1 = 1000 A_3$

where A_3 is the value listed in Table A-3;

- (b) A₂ is the more restrictive of the following two values:
 - (i) The corresponding A_1 ; and
 - (ii) The value A₃ obtained from Table A-3.
- (3) For any single radionuclide whose identity is unknown, the value of A_1 is taken to be two Ci and the value of A_3 is taken to be 0.002 Ci. However, if the atomic number of the radionuclide is known to be less than 82, the value of A_1 is taken to be 10 Ci and the value of A_2 is taken to be 0.4 Ci.
- II. Mixtures of radionuclides, including radioactive decay chains.
- (1) For mixed fission products the following activity limits may be assumed if a detailed analysis of the mixture is not carried out:

 $A_1 = 10 \text{ Ci}$ $A_2 = 0.4 \text{ Ci}$

- (2) A single radioactive decay chain is considered to be a single radionuclide when the radionuclides are present in their naturally occurring proportions and no daughter nuclide has a half-life either longer than 10 days or longer than that of the parent nuclide. The activity to be taken into account and the A_1 or A_2 value from Table A-1 to be applied are those corresponding to the parent nuclide of that chain. When calculating A_1 or A_2 values, radiation emitted by daughters must be considered. However, in the case of radioactive decay chains in which any daughter nuclide has a half-life either longer than 10 days or greater than that of the parent nuclide, the parent and daughter nuclides are considered to be mixtures of different nuclides.
- (3) In the case of a mixture of different radionuclides, where the identity and activity of each radionuclide are known, the permissible activity of each radionuclide $R_1,\ R_2\ .\ .\ .\ R_n$ is such that $F_1+F_2+.\ .F_n$ is not greater than unity, where

$$F_1 = \frac{\text{Total activity of } R_1}{A_1(R_1)}$$

$$F_{2} = \frac{\text{Total activity of } R_{2}}{A_{1}(R_{2})}$$

$$F_{n} = \frac{\text{Total activity of } R_{n}}{A_{1}(R_{n})}$$

 $A_1(R_1, R_2...R_n)$ is the value of A_1 or A_2 as appropriate for the nuclide R_1, R_2, R_n .

(4) When the identity of each radionuclide is known but the individual activities of some of the radionuclides are not known, the formula given in paragraph (3) is applied to establish the values of A_1 or A_2 as appropriate. All the radionuclides whose individual activities are not known (their total activity will, however, be known)

are classed in a single group and the most restrictive value of A_1 and A_2 applicable to any one of them is used as the value of A_1 or A_2 in the denominator of the fraction.

- (5) Where the identity of each radionuclide is known but the individual activity of none of the radionuclides is known, the most restrictive value of A_1 or A_2 applicable to any one of the radionuclides present is adopted as the applicable value.
- (6) When the identity of none of the nuclides is known, the value of A_1 is taken to be two Ci and the value of A_2 is taken to be 0.002 Ci. However, if alpha emitters are known to be absent, the value of A_2 is taken to be 0.4 Ci.

TABLE A-1.—A₁ AND A₂ VALUES FOR RADIONUCLIDES

Symbol of radionuclide	Element and atomic number	A ₁ (Ci)	A ₂ (Ci)	Specific activity (Ci/g)	
7 _{Ac}	Actinium (89)	1000	0.003	7.2X10	
8 _{Ac}	, ,	.10	.4	2.2×10^6	
5_{Ag}	Silver (47)	40	40	3.1×10^4	
Om _{Ag}	* *	7	7	4.7×10^3	
1 _{Ag}		100	20	1.6×10^{5}	
1 _{Am}	Americium (95)	8	0.008	3.2	
S _{Am}	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	8	0.008	1.9×10^{-1}	
Ar(compressed or uncompressed)*	Argon (18)	1000	1000	1.0×10^{5}	
\(\frac{1}{2}\)(\text{uncompressed}\)*	7.1.go.i. (10)	20	20	$4.3X10^{7}$	
Ar(compressed)*		1	1	4.3×10^{7}	
As	Arsenic (33)	1000	400	2.4×10^4	
As	Alseme (55)	20	20	1.0X10 ⁵	
As As		10	10	1.6X10 ⁶	
As				1.1X10 ⁶	
As	Actating (95)	300	20		
l _{At}	Astatine (85)	200	7	2.1X10 ⁶	
3_{Au}	Gold (79)	200	200	9.3X10 ⁵	
6 _{Au}		30	30	1.2X10 ⁵	
8 _{Au}		40	20	2.5×10^{5}	
Au		200	25	2.1×10^{5}	
l _{Ba}	Barium (56)	40	40	8.7×10^4	
B_{Ba}		40	10	4.0×10^{2}	
$D_{ m Ba}$		20	20	7.3×10^{4}	
	Beryllium (4)	300	. 300	3.5X10 ⁵	
$\delta_{ m Bi}$	Bismuth (83)	5	5	9.9X10 ⁴	
7 _{Bi}	, ,	10	10	$2.2X10^{2}$	
)Bi (RaE)		100	4	1.2×10^{5}	
2_{Bi}		6	6	1.5×10^7	
θ_{Bk}	Berkelium (97)	1000	1	1.8×10^{3}	
Br	Bromine (35)	70	25	7.1×10^{5}	
3r		6	6	1.1X10 ⁶	
DT	Carbon (6)	20	20	8.4X10 ⁸	
	Carbon (0)	1000	60	4.6	
Ca	Calcium (20)	1000	25	1.9X10 ⁴	
Da -	Calcium (20)	20	20	5.9X10 ⁵	
Ca OCd	Cadmium (48)	1000	70	2.6×10^{3}	
² Cd 5m _{Cd}	Caumum (40)	30	30		
				2.6×10^4	
Cd	Cariana (59)	80	20	5.1×10^{3}	
Ce Ce	Cerium (58)	100	100	6.5×10^{3}	
Се		300	25	2.8X10 ⁴	
Ce		60	20	6.6×10^{5}	
Ce		10	7	3.2×10^3	
Cf	Californium (98)	2	0.002	3.1	
Oct		7	0.007	1.3×10^{2}	
Cr		2	0.009	6.5×10^{2}	
a	Chlorine (17)	300	10	3.2×10^{-2}	
21		10	10	1.3×10^{8}	
C _{Cm}	Curium (96)	200	0.2	3.3×10^{3}	
Cm	,	9	0.009	4.2X10	
Cm		10	0.01	8.2X10	
				1.0X10 ⁻¹	

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Table A-1.— A_1 and A_2 values for radionuclides

	Symbol of radionuclide	Element and atomic number	A ₁ (Ci)	A ₂ (Ci)	Specific activity (Ci/g)
46 _{Cm}			6	0.006	3.6X10 ⁻¹
6 _{Co}		Cobalt (27)	5	5	3.0×10^4
Co		,	90	90	8.5×10^{3}
m _{Co}			1000	1000	5.9×10^6
Co			20	20	3.1×10^4
Co			7	7	1.1×10^{3}
Co Cr		Chromium (24)	600	600	9.2×10^4
9 _{Cs}		Cesium (55)	40	40	7.6×10^{5}
1 _{Cs}		Costain (55)	1000	1000	1.0X10 ⁵
4m _{Cs}			1000	10	7.4×10^{6}
			10	10	1.2×10^{3}
4_{Cs}			1000	25	8.8X10 ⁻⁴
5 _{Cs}				7	7.4X10 ⁴
6_{Cs}			7		
7_{Cs}		G (50)	30	10	9.8X10
Cu		Copper (29)	80	25	3.8X10 ⁶
Cu			200	25	7.9×10^{5}
5_{Dy}		Dysprosium (66)	100	20	8.2X10 ⁶
$\mathfrak{b}_{\mathbf{D}\mathbf{y}}$			1000	200	2.3×10^{5}
$9_{\rm Er}$		Erbium (68)	1000	25	8.2×10^4
l _{Er}		,	50	20	2.4×10^{6}
2m _{Eu}		Europium (63)	30	30	2.2×10^6
2111Eu 2 _{Eu}		Daropium (05)	20	10	1.9×10^{2}
			10	5	1.5×10^{2}
4 _{Eu}			400	60	1.4×10^{3}
$5_{\rm Eu}^{-1}$		Fluorine (9)	20	20	9.3X10 ⁷
F					
Fe		Iron (26)	5	5	7.3X10 ⁶
Fe			1000	1000	2.2×10^{3}
Fe			10	10	4.9×10^{4}
Ga		Gallium (31)	100	100	6.0×10^{3}
Ga			20	20	4.0×10^{7}
Ja Ja			7	7	3.1×10^{6}
3_{Gd}		Gadolinium (64)	200	100	3.6×10^{3}
9_{Gd}		(,	300	20	1.1×10^6
Ge Ge		Germanium (32)	20	10	7.0×10^{3}
Ge Ge		Germanian (32)	1000	1000	1.6X10 ⁵
Ge		Hydrogen (1) see T-Tritium	1000	1000	1.07110
			30	25	1.6×10^4
1_{Hf}		Hafnium (72)			6.6X10 ⁵
7m _{Hg}		Mercury (80)	200	200	0.0X10
$7_{\rm Hg}$			200	200	2.5X10 ⁵
3 _{Hg}			80	25	1.4X10 ⁴
6_{Ho}		Holmium (67)	30	30	6.9X10 ⁵
3 ₁		Iodine(53)	50	50	1.9X10 ⁶
51			1000	70	1.7×10^4
οī			40	10	7.8×10^4
P _I			1000	2	1.6×10^{-4}
l _I			40	10	1.2×10^{5}
$\tilde{2}_{1}^{1}$			7	7	1.1×10^{7}
			30	10	1.1X10 ⁶
3 ₁			8	8	2.7X10 ⁷
1 ₁					3.5X10 ⁶
51		Indiana (40)	10	10	
l _{In}		Indium (49)	30	25	4.2X10 ⁵
$3m_{In}$			60	60	1.6X10'
im _{in}			30	20	2.3X10 ⁴
$5m_{In}$			100	20	6.1X10 ⁶
O_{Ir}		Iridium (77)	10	10	6.2×10^4
2 _{1r}		• **	20	10	9.1×10^{3}
1 _{1r}			10	10	8.5×10^{5}
`1r K		Potassium (19)	10	10	6.0×10^6
ζ.			20	10	3.3X10 ⁶
	ncompressed)*	Krypton (36)	100	100	8.4X10 ⁶
		Krypton (50)	3	3	8.4X10 ⁶
IIKr(CO	ompressed)*				0.4A.1U
Krjunco	ompressed)*		1000	1000	4.0×10^{2}
	pressed)*		5	5	4.0×10^{2}
	ompressed)*		20	20	2.8×10^{7}
Kr(com	pressed)*		0.6	0.6	2.8×10^{7}
0 _{La}		Lanthanum (57)	30	30	$5.6X10^{5}$
		Low specific activity material—see	§ 71.4		
AZI		Lutetium (71)	300	25	$1.1X10^{5}$
LSA 71					
LSA 7 _{Lu} MFP		Mixed fission products	10	0.4	

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TABLE A-1.—A₁ AND A₂ VALUES FOR RADIONUCLIDES

Sym	nbol of radionuclide	Element and atomic number	A ₁ (Ci) A ₂ (Ci)	Specific activity (Ci/g)
B _{Mg}		Magnesium (12)	6	6	5.2X10 ⁶
2 _{Mn}		Manganese (25)	5	5	4.4X10 ⁵
Mn			20	20	8.3×10^{3}
Mn			5	5	2.2×10^{7}
Mo		Molybdenum (42)	100	20	4.7×10^{5}
N		Nitrogen (7)	20	10	1.5X10 ⁹
Na		Sodium (11)	8	8	6.3×10^3
l _{Na}			5	5	8.7×10^6
3m _{Nb}		Niobium (41)	1000	200	1.1×10^{3}
Nb			20	20	3.9×10^4
Nb			20	20	2.6X10'
17 _{Nd}		Neodymium (60)	100	20	8.0×10^4
9_{Nd}			30	20	1.1×10^7
Ni Ni		Nickel (28)	1000	900	8.1×10^{-2}
3 _{Ni}			1000	100	4.6X10
Ni Ni			10	10	1.9×10^7
17 _{Np}		Neptunium (93)	5	0.005	6.9X10 ⁻⁴
9 _{Np}		. ,	200	25	2.3×10^{5}
S5 _{Os}		Osmium (76)	20	20	$7.3X10^{3}$
1 _{Os}			600	200	4.6×10^4
Olm _{Os}			200	200	1.2X10 ⁶
93 _{Os}			100	20	5.3X10 ⁵
$\Sigma_{\rm p}$		Phosphorus (15)	30	30	2.9X10 ⁵
² p 30 _{Pa}		Protactinium (91)	20	0.8	3.2×10^4
ор _а З1 _{Ра}		210000000000000000000000000000000000000	20	0.002	4.5X10 ⁻²
33 _{Pa}			100	100	2.1×10^{4}
93 _{Pa} 91 _{Pb}		Lead (82)	20	20	1.7X10 ⁶
10		Lead (62)	100	0.2	8.8X10
10 _{Pb}			6	5	1.4X10 ⁶
12 _{Pb}		Palladium (46)	1000	700	7.5X10 ⁴
)3 _{Pd}		Panadium (40)	100		2.1X10 ⁶
09 _{Pd}		Donous ethicus (C1)		20 25	9.4×10^{2}
17 _{Pm}		Promethium (61)	1000	20	4.2X10 ⁵
49 _{Pm}		D-1 (9.4)	100		4.2X10
10_{Po}		Polonium (84)	200	0.2	4.5×10^{3}
12 _{Pr}		Praseodymium (59)	10	10	1.2X10 ⁴
43 _{Pr}		71 (4 (70)	300	20	6.6×10^4
91 _{Pt}		Platinum (78)	100	100	2.3X10 ⁵
$93m_{Pt}$			200	200	2.0×10^{5}
97m _{Pt}			300	20	1.2X10 ⁷
97 _{Pt}			300	20.	8.8X10 ⁵
38 _{Pu}		Plutonium (94)	3	0.003	1.7X10
39 _{Pu}			2	0.002	$6.2X10^{-2}$
40 _{Pu}			2	0.002	2.3×10^{-1}
41 _{Pu}			1000	0.1	1.1×10^{2}
12 _{Pu}			3	0.003	3.9×10^{-3}
23 _{Ra}		Radium (88)	50	0.2	5.0×10^4
24_{Ra}			6	0.5	1.6X10 ⁵
26_{Ra}			10	0.05	1.0
28 _{Ra}			10	0.05	2.3×10^{2}
22 _{Rn}		Radon (86)	10	2	1.5X10 ⁵
Rb		Rubidium (37)	30	25	8.2X10 ⁶
Rb			30	30	8.1×10^4
7 _{Rb}			Unlimited	Unlimited	6.6X10 ⁻⁸
b(natural)			Unlimited	Unlimited	1.8×10^{-5}
36 _{Re}		Rhenium (75)	100	20	1.9X10 ⁵
37 _{Re}		• /	Unlimited	Unlimited	3.8×10^{-8}
38 _{Re}			10	10	1.0×10^6
(natural)			Unlimited	Unlimited	2.4X10 ⁻⁸
)3m _{Rh}		Rhodium (45)	1000	1000	3.2×10^{7}
)5 _{Rh}		()	200	25	8.2X10 ⁵
7 _{Ru}		Ruthenium (44)	80	80	5.5X10 ⁵
)3 _{Ru}		zcacnomum (17)	30	25	3.2X10 ⁴
)5 _{Ru}			20	20	6.6×10^6
)5 _{Ru})6 _{Ru}			10	7	3.4X10 ³
		Sulphur (16)	1000	60	4.3X10 ⁴
5 _S					$\frac{4.3 \times 10^{5}}{3.9 \times 10^{5}}$
22 _{Sb}		Antimony (51)	30	30	3.9X10°
24 _{Sb}			5	5	1.8X10 ⁴
25_{Sb}		Scandium (21)	40 8	25 8	1.4X10 ³ 3.4X10 ⁴
$6_{ m Sc}$					

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TABLE A-1.—A₁ AND A₂ VALUES FOR RADIONUCLIDES

Symbol of radionuclide	of radionuclide Element and atomic number A ₁		Ci) A ₂ (Ci)	Specific activity (Ci/g)	
7 _{Sc}		200	20	8.2X10 ⁵	
3_{Sc}		5	5	1.5×10^6	
Se	Selenium (34)	40	40	1.4×10^{4}	
Si	Silicon (14)	100	20	3.9X10'	
7_{Sm}	Samarium (62)	Unlimited	Unlimited	2.0×10^{-8}	
1 _{Sm}		1000	90	2.6X10	
3 _{Sm}		300	20	4.4X10 ⁵	
3_{Sn}	Tin (50)	60	60	1.0×10^{4}	
9m _{Sn}	` ,	100	100	4.4×10^{3}	
5 _{Sn}		10	10	$1.1 \times 10^{5}_{-}$	
n _{Sr}	Strontium (38)	80	80	$3.2X10^{7}$	
···sr Sr		30	30	2.4×10^4	
m _{Sr}		50	50	1.2×10^{7}	
er Sr		100	10	2.9×10^4	
Sr Sr		10	0.4	1.5×10^{2}	
Sr		10	10	3.6X10 ⁶	
Sr		10	10	1.3X10 ⁷	
Sr O.	(T) '(' (1)			9.7×10^{3}	
incompressed)*	Tritium (1)	1000	1000		
compressed)*		1000	1000	9.7×10^3	
ectivated luminous paint)		1000	1000	9.7×10^3	
bsorbed on solid carrier)		1000	1000	9.7×10^{3}	
ritiated water)		1000	1000	9.7×10^{3}	
other forms)		20	20	9.7×10^{3}	
2 _{Ta}	Tantalum (73)	20	20	6.2×10^{3}	
0_{Tb}	Terbium (65)	20	10	1.1×10^{4}	
m _{Tc}	Technetium (43)	1000	1000	3.8×10^{7}	
Te	` ,	6	6	3.2×10^5	
m _{Tc}		1000	200	1.5X10 ⁴	
Te Te		-1000	400	1.4×10^{-3}	
m _{Te}		100	100	5.2X10 ⁶	
Tc		1000	25	1.7X10 ⁻²	
Tc	Tellurium (52)	1000	100	1.8X10 ⁴	
5m _{Te}	1 chullum (32)	300	20	4.0×10^4	
7M _{Te}		300	20	2.6X10 ⁶	
7 _{Te}			10	2.5×10^4	
9M _{Te}		30			
9 _{Te}		100	20	2.0X10 ⁷	
1m _{Te}		10	10	8.0X10 ⁵	
2_{Te}		7	7	3.1×10^{5}	
7_{Th}	Thorium (90)	200	0.2	3.2×10^4	
8 _{Th}		6	0.008	8.3×10^{2}	
0_{Th}		3	0.003	1.9×10^{-2}	
1 _{Th}		1000	25	5.3X10 ⁵	
2 _{Th}		Unlimited	Unlimited	1.1×10^{-7}	
4 _{Th}		10	10	2.3×10^4	
(natural)		Unlimited	Unlimited	2.2×10^{-7}	
irradiated)**					
0_{T_1}	Thallium (81)	20	20	5.8×10^{5}	
րը 1 ₁₇₁		200	200	2.2X10 ⁵	
2 _{T1}		40	40	5.4X10 ⁴	
271 4 ₇₁		300	10	$4.3X10^{2}$	
7 II	Thulium (69)	300	10	6.0×10^{3}	
0 _{Tm}	inunum (02)	1000	100	1.1×10^3	
1 _{Tm}	Uranium (92)	100	0.1	2.7X10 ⁴	
$0_{ m U}$	Oramum (92)		0.03	2.1X10 2.1X10	
$2_{\rm U}$. 30		9.5×10^{-3}	
3 _U		100	0.1	6.2×10^{-3}	
<u>4</u> υ		100	0.1	0.2X10 °	
5 _U		100	0.2	2.1×10^{-6}	
6 _Մ		200	0.2	6.3×10^{-5}	
$8_{ m U}$		Unlimited	Unlimited	3.3×10^{-7}	
natural)		Unlimited	Unlimited	(SEE TABLE A-4)	
enriched) < 20%		Unlimited	Unlimited	(SEE TABLE A-4)	
20% or greater		100	0.1	(SEE TABLE A-4)	
depleted)		Unlimited	Unlimited	(SEE TABLE A-4)	
irradiated)***				1.7X10 ⁵	
V	Vanadium (23)	6	. 6	1 / X I I I -	

TABLE A-1.—A1 AND A2 VALUES FOR RADIONUCLIDES

(See footnotes at end of table)

Symbol of radionuclide	Element and atomic number	A ₁ (Ci)	A ₂ (Ci)	Specific activity (Ci/g)
181 _W	Tungsten (74)	200	100	5.0X10 ³
185 _W		1000	25	9.7×10^{-3}
87 _W		40	20	7.0×10^{5}
27 _{Xe} (uncompressed)*	Xenon (54)	70	70	2.8×10^4
27 _{Xe} (compressed)*		5	5	2.8×10^4
31m _{Xe} (compressed)*		10	10	1.0×10^{5}
31m _{Xe} (uncompressed)*		100	100	1.0×10^{5}
33 _{Xe} (uncompressed)*		1000	1000	1.9×10^{5}
33 _{Xe} (compressed)*		5	5	1.9×10^{5}
35 _{Xe} (uncompressed)*		70	70	$2.5X10^{5}$
35 _{Xe} (compressed)*		2	2	2.5×10^{5}
$7_{ m Y}$	Yttrium (39)	20	20	4.5X10
$0_{ m Y}$		10	10	2.5×10^{5}
$1m_Y$		30	30	4.1×10^{7}
1 _Y		30	30	2.5×10^4
2_{Y}		10	10	9.5×10^{6}
$3_{ m Y}$		10	10	$3.2X10^6$
69 _{Yb}	Ytterbium (70)	80	80	2.3×10^{5}
75 _{Yb}		400	25	1.8×10^{5}
5_{Zn}	Zinc (30)	30	30	8.0×10^{3}
$9m_{Zn}$		40	20	3.3×10^{6}
9_{Zn}		300	20	5.3×10^7
$3_{ m Zr}$	Zirconium (40)	1000	200	3.5×10^{-3}
5_{Zr}		20	20	2.1×10^4
$7_{Z_{\Gamma}}^{-}$		20	20	2.0×10^6

^{*}For the purpose for Table A-1, compressed gas means a gas at a pressure which exceeds the ambient atmospheric pressure at the location where the containment system was closed.

TABLE A-2 RELATIONSHIP BETWEEN A1 AND $\rm E_{max}$ FOR BETA EMITTERS

$E_{max}(MeV)$	A ₁ (Ci)	
< 0.5	1000	
0.5 - < 1.0	300	
1.0 - < 1.5	100	
1.5 - < 2.0	30	
≥ 2.0	10	

 $\begin{tabular}{ll} TABLE $A-3$ \\ RELATIONSHIP BETWEEN A_3 AND THE ATOMIC NUMBER \\ OF THE RADIONUCLIDE \\ \end{tabular}$

A ₃							
	Half-life less	Half-life 1000	Half-life greater				
	than 1000 days	days to 10 ⁶ years	than 10 ⁶ years				
1 to 81	3 Ci	.05 Ci	3 Ci				
82 and abo	ove .002 Ci	.002 Ci	3 Ci				

TABLE A-4—ACTIVITY-MASS RELATIONSHIPS FOR URANIUM/THORIUM

The store and over these	Specific	activity
Thorium and uranium — enrichment ¹ wt % ²³⁵ U present	Ci/g	g/Ci
0.45	$.0x10^{-7}$	2.0x10 ⁶
0.72 (natural) 7.0	$06x10^{-7}$	1.42×10^6
1.0	$6x10^{-7}$	1.3×10^6
1.5	$.0x10^{-6}$	1.0×10^6
5.0	$.7x10^{-6}$	$3.7x10^5$
10.0	$.8 \times 10^{-6}$	2.1×10^5
20.0	$.0x10^{-5}$	1.0×10^{5}
35.0 2.	$.0x10^{-5}$	$5.0x10^4$
50.0	$.5 \times 10^{-5}$	4.0×10^4
90.0	$.8 \times 10^{-5}$	1.7×10^4
93.0 7.	$.0x10^{-5}$	1.4×10^4
95.0 9 <i>.</i>	1×10^{-5}	1.1×10^4
Natural Thorium		4.6×10^6

¹ The figures for uranium include representative values for the activity of the uranium-234 which is concentrated during the enrichment process. The activity for Thorium includes the equilibrium concentration of Thorium-228.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–220–110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–12–200, filed 12/11/86; Order 1095, § 402–12–200, filed 2/6/76.]

^{**}The values of A₁ and A₂ must be calculated in accordance with the procedure specified in Appendix A, paragraph II(3), taking into account the activity of the fission products and of the uranium-233 in addition to that of the thorium.

^{***}The values of A₁ and A₂ must be calculated in accordance with the procedure specified in Appendix A, paragraph II(3), taking into account the activity of the fission products and plutonium isotopes in addition to that of the uranium.

WAC 246-220-120 Appendix B--Information on transportation special form licensed material. (1) "Special form" means any of the following physical forms of licensed material:

- (a) The material is in solid form having no dimension less than 0.5 millimeter or at least one dimension greater than five millimeters; does not melt, sublime, or ignite in air at a temperature of 1,000 degrees Fahrenheit; will not shatter or crumble if subjected to the percussion test described in this section; and is not dissolved or converted into dispersible form to the extent of more than 0.005 percent by weight by immersion for one week in water at 68 degrees Fahrenheit or in air at 86 degrees Fahrenheit; or
- (b) The material is securely contained in a capsule having no dimension less than 0.5 millimeter or at least one dimension greater than five millimeters, which will retain its contents if subjected to the tests prescribed in this section; and which is constructed of materials which do not melt, sublime, or ignite in air at 1,475 degrees Fahrenheit, and do not dissolve, or convert into dispersible form, to the extent of more than 0.005 percent by weight by immersion for one week in water at 68 degrees Fahrenheit or in air at 86 degrees Fahrenheit.
 - (2) Tests for special form licensed material.
- (a) Free drop A free drop through a distance of thirty feet onto a flat essentially unyielding horizontal surface, striking the surface in such a position as to suffer maximum damage.
- (b) Percussion Impact of the flat circular end of a one inch diameter steel rod weighing three pounds, dropped through a distance of forty inches. The capsule or material shall be placed on a sheet of lead, of hardness number 3.5 to 4.5 on the Vickers scale, and not more than one inch thick, supported by a smooth essentially unyielding surface.
- (c) Heating Heating in air to a temperature of 1,475 degrees Fahrenheit and remaining at that temperature for a period of ten minutes.
- (d) Immersion Immersion for twenty-four hours in water at room temperature. The water shall be at pH 6-pH 8, with a maximum conductivity of ten microohms per centimeter.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–220–120, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–12–210, filed 12/11/86; Order 1095, § 402–12–210, filed 2/6/76.]

WAC 246-220-130 Appendix C--The international system of units (SI). This appendix does not contain any regulations, but is included for informational purposes only.

The Metric Conversion Act of 1975 (PL 94–168) urges the increasing awareness and use of the International System of Units (SI). This appendix is included to acquaint licensees and/or registrants with selected terms of SI units. Future revisions to Title 402 WAC may use these units.

(1) Absorbed dose. The unit of absorbed dose is the gray (Gy) which is equal to 1 joule per kilogram. One

rad is equal to 1×10^{-2} gray. A submultiple is the milligray (mGy).

- (2) Dose equivalent. The unit of dose equivalent is the sievert (Sv) which is equal to 1 joule per kilogram as modified by the quality factor. One rem is equal to 1 x 10-2 sievert. A submultiple is the millisievert (mSv).
- (3) Exposure. The unit of exposure is the coulombs per kilogram (C/kg). One roentgen is equal to 2.58 x 10⁻⁴ coulombs per kilogram of dry air. Multiples of this unit are the millicoulomb per kilogram (mC/kg) and the microcoulomb per kilogram (uC/kg) of dry air at standard temperature and pressure.
- (4) Radioactivity. The unit of measurement of radioactivity is the becquerel (Bq) and is equal to one transformation per second. One curie is equal to 3.7 x 10¹⁰ becquerels. Multiples are megabecquerel (MBq) and gigabecquerel (GBq).

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-220-130, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-12-250, filed 12/8/80.]

Chapter 246-221 WAC

RADIATION PROTECTION STANDARDS

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Appendix B—Quantities exempt from labeling.

246-221-300

WAC 246-221-001 Purpose and scope. This chapter establishes standards for protection against radiation hazards. Except as otherwise specifically provided, this chapter applies to all licensees or registrants. Nothing in this chapter shall be interpreted as limiting the intentional exposure of patients to radiation for the purpose of medical diagnosis or therapy. The definitions contained in WAC 402-12-050 also apply to this chapter. Chapter 402-10 WAC, Statement of philosophy, is directly applicable to this chapter.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as 246-221-001, filed 12/27/90, effective 1/31/91; Order 1095, § 402-24-010, filed 2/6/76; Order 1, § 402-24-010, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-221-010 Radiation dose to individuals in restricted areas.* (1) Except as provided in subsection (2) of this section no licensee or registrant shall possess, use, store, receive, or transfer sources of radiation in such a manner as to cause any individual in a restricted area to receive in any period of one calendar quarter from all sources of radiation in the licensee's or registrant's possession a dose in excess of the limits specified in the following table:

Rem per Calendar Quarter

Whole body; head and trunk; active blood-forming
organs; lens of eyes; or gonads
Hands and forearms; feet and ankles 18.75
Skin of whole body

Note: *For determining the doses specified in this section a dose from x- or gamma rays up to 10 MeV may be assumed to be equivalent to the exposure measured by a properly calibrated appropriate instrument in air at or near the body surface in the region of the highest dose rate.

- (2) A licensee or registrant may permit an individual in a restricted area to receive a dose to the whole body greater than that permitted under subsection (1) of this section, provided that:
- (a) During any calendar quarter the dose to the whole body from sources of radiation in the licensee's or registrant's possession shall not exceed three rems; and
- (b) The dose to the whole body, when added to the accumulated occupational dose to the whole body, shall not exceed 5(N-18) rems when "N" equals the individual's age in years at the individual's last birthday; and
- (c) The licensee or registrant has determined the individual's accumulated occupational dose to the whole body on department Form RHF-4 or on a clear and legible record containing all the information required in that form and has otherwise complied with the requirements of WAC 402-24-024. As used in subsection (2) of this section "dose to the whole body" shall be deemed to include any dose to the whole body, gonads, active blood-forming organs, head and trunk, or lens of the eye; and
- (d) The licensee or registrant has determined that the predicted dose to the whole body is as low as is reasonably achievable and consistent with the statements in WAC 402-10-010. The licensee or registrant shall perform an evaluation of the expected whole body dose before permitting any individual to receive a whole body

dose in excess of the limits specified in subsection (1) of this section.

A written record of the prior evaluation of this exposure shall be retained for inspection by the department.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–24–020, filed 12/11/86. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–24–020, filed 12/8/80; Order 1095, § 402–24–020, filed 2/6/76; Order 1, § 402–24–020, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-221-020 Determination of prior accumulated dose. Determination of prior dose. Each licensee or registrant shall require any individual, prior to first entry of the individual into the licensee's or registrant's restricted area during each employment or work assignment under such circumstances that the individual will receive or is likely to receive in any period of one calendar quarter an occupational dose in excess of 25 percent of the applicable standards specified in WAC 402-24-020(1) and 402-24-035 to disclose and verify in a written, signed statement, either:

- (1) That the individual had no prior occupational dose during the current calendar quarter; or
- (2) The nature and amount of any occupational dose which the individual may have received during that specifically identified current calendar quarter from sources of radiation possessed or controlled by other persons. Each licensee shall maintain records of such statements until the department authorizes their disposition.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–24–024, filed 12/8/80; Order 1095, § 402–24–024, filed 2/6/76.]

WAC 246-221-030 Requirements for exceeding occupational radiation doses. (1) Before permitting, pursuant to WAC 402-24-020(2), any individual in a restricted area to receive an occupational radiation dose in excess of the standards specified in WAC 402-24-020(1) each licensee or registrant shall:

- (a) Obtain a certificate on state of Washington occupational external radiation exposure history (Form RHF-4) or on a clear and legible record containing all the information required in that form, signed by the individual, showing each period of time after the individual attained the age of 18 in which the individual received an occupational dose of radiation; and
- (b) Calculate on Form RHF-4 in accordance with the instructions appearing therein, or on a clear and legible record containing all the information required in that form, the previously accumulated occupational dose received by the individual and the additional dose allowed for that individual under WAC 402-24-020(2).

In the preparation of Form RHF-4, or a clear and legible record containing all the information required in that form, the licensee or registrant shall make a reasonable effort to obtain reports of the individual's previously accumulated occupational dose. For each period for which the licensee or registrant obtains such reports, the dose shown in the report shall be used in preparing

the form. In any case where a licensee or registrant is unable to obtain reports of the individual's occupational dose for a previous complete calendar quarter, it shall be assumed that the individual has received the occupational dose specified in whichever of the following columns apply:

Column 1
Assumed Dose in Rems for Calendar Quarters
Prior to January 1, 1961

Column 2
Assumed Dose in Rems for Calendar Quarters
Beginning on or After
January 1, 1961

Part of Body

Whole body, gonads, active blood-forming organs, head and trunk, lens of eye

3.75

1.25

(2) The licensee or registrant shall retain and preserve records used in preparing Form RHF-4 until the department authorizes their disposition. If calculation of the individual's accumulated occupational dose for all periods prior to January 1, 1961, yields a result higher than the applicable accumulated dose value for the individual as of that date, as specified in WAC 402-24-020 (2)(b) the excess may be disregarded.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as 246-221-030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-24-027, filed 12/8/80.]

WAC 246-221-040 Exposure of individuals to concentrations of radioactive materials in restricted areas. (1) Requirements for exposures to individuals.

- (a) No licensee shall possess, use, or transfer radioactive material in such a manner as to permit any individual in a restricted area to inhale a quantity of radioactive material in any period of one calendar quarter greater than the quantity which would result from inhalation for 40 hours per week for 13 weeks at uniform concentrations of radioactive material in air specified in WAC 402-24-220, Appendix A, Table I, Column 1¹, ², ³. If the radioactive material is of such form that intake by absorption through the skin is likely, individual exposures to radioactive material shall be controlled so that the uptake of radioactive material by any organ from either inhalation or absorption or both routes of intake 4, 5 in any calendar quarter does not exceed that which would result from inhaling such radioactive material for 40 hours per week for 13 weeks at uniform concentrations specified in WAC 402-24-220, Appendix A, Table I, Column 1.
- (b) No licensee shall possess, use, or transfer mixtures of U-234, U-235, and U-238 in soluble form in such a manner as to permit any individual in a restricted area to inhale a quantity of such material in excess of the intake limits specified in Appendix A, Table I, Column 1 of this part. If such soluble uranium is of a form such that absorption through the skin is likely, individual exposures to such material shall be controlled so that the uptake of such material by any organ from either inhalation or absorption or both routes of intake⁴ does not exceed that which would result from inhaling such material at the limits specified in WAC 402-24-220, Appendix A, Table I, Column 1 and footnote 4 thereto.

- (c) For purposes of determining compliance with the requirements of WAC 402-24-030 the licensee shall use suitable measurements of concentrations of radioactive materials in air for detecting and evaluating airborne radioactivity in restricted areas and in addition, as appropriate, shall use measurements of radioactivity in the body, measurements of radioactivity excreted from the body, or any combination of such measurements as may be necessary for timely detection and assessment of individual intakes of radioactivity by exposed individuals. It is assumed that an individual inhales radioactive material at the airborne concentration in which he is present unless he uses respiratory protective equipment pursuant to WAC 402-24-030. When assessment of a particular individual's intake of radioactive material is necessary, intakes less than those which would result from inhalation for 2 hours in any one day or for 10 hours in any one week at uniform concentrations specified in Appendix A, Table I, Column 1 need not be included in such assessment, provided that for any assessment in excess of these amounts the entire amount is included.
- (2) (a) The licensee shall, as a precautionary procedure, use process or other engineering controls, to the extent practicable, to limit concentrations of radioactive materials in air to levels below those which delimit an airborne radioactivity area as defined in WAC 402-12-050 (5)(b).
- (b) When it is impracticable to apply process or other engineering controls to limit concentrations of radioactive material in air below those defined in WAC 402-12-050 (5)(b), other precautionary procedures, such as increased surveillance, limitation of working times, or provision of respiratory protective equipment, shall be used to maintain intake of radioactive material by any individual within any period of seven consecutive days as far below that intake of radioactive material which would result from inhalation of such material for 40 hours at the uniform concentrations specified in Appendix A, Table I, Column 1 as is reasonably achievable. Whenever the intake of radioactive material by any individual exceeds this 40-hour control measure, the licensee shall make such evaluations and take such actions as are necessary to assure against recurrence. The licensee shall maintain records of such occurrences, evaluations, and actions taken in a clear and readily identifiable form suitable for summary review and evaluation.
- (3) When respiratory protective equipment is used to limit the inhalation of airborne radioactive material pursuant to WAC 402-24-030 (2)(b), the licensee may make allowance for such use in estimating exposures of individuals to such materials provided that such equipment is used as stipulated in Regulatory Guide 8.15, "Acceptable Programs for Respiratory Protection."
- (4) Notwithstanding the provisions of WAC 412-24-030 (2) and (3), the department may impose further restrictions:
- (a) On the extent to which a licensee may make allowance for use of respirators in lieu of provision of process, containment, ventilation, or other engineering

controls, if application of such controls is found to be practicable; and

- (b) As might be necessary to assure that the respiratory protective program of the licensee is adequate in limiting exposures of personnel to airborne radioactive materials.
- (5) The licensee shall notify, in writing, the department at least 30 days before the date that respiratory protective equipment is first used under the provisions of WAC 402-24-030.
- (6) A licensee who was authorized to make allowance for use of respiratory protective equipment prior to the effective date of this regulation shall bring his respiratory protective program into conformance with the requirements of WAC 402-24-030(3) within one year of that date; and is exempt from the requirements of WAC 402-24-030(5).

Notes: ¹Since the concentration specified for tritium oxide vapor assumes equal intakes by skin absorption and inhalation, the total intake permitted is twice that which would result from inhalation alone at the concentration specified in H-3(s) in Appendix A, Table I, Column 1 for 40 hours per week for 13 weeks.

²For radioactive materials designated "sub" in the "isotope" column of the table, the concentration value specified is based upon exposure to the material as an external radiation source. Individual exposures to these materials may be accounted for as part of the limitation on individual dose in WAC 402–24–020. These materials shall be subject to the precautionary procedures required by WAC 402–24–030 (2)(a).

³Multiply the concentration values specified in Appendix A, Table I, Column 1 by 6.3 x 10⁸ ml to obtain the quarterly quantity limit. Multiply the concentration value specified in Appendix A, Table I, Column 1 of this part by 2.5 x 10⁹ ml to obtain the annual quantity limit for Rn-222.

⁴Significant intake by ingestion or injection is presumed to occur only as a result of circumstances such as accident, inadvertence, poor procedure, or similar special conditions. Such intakes must be evaluated and accounted for by techniques and procedures as may be appropriate to the circumstances for the occurrence. Exposures so evaluated shall be included in determining whether the limitation on individual exposures in WAC 402–24–030 (1)(a) has been exceeded.

⁵Regulatory guidance on assessment of individual intakes of radioactive material is given in Regulatory Guide 8.9, "Acceptable Concepts, Models, Equations and Assumptions for a Bioassay Program," single copies of which are available from the Office of Standards Development, United States Nuclear Regulatory Commission, Washington, D.C. 20555, upon written request.

⁶Single copies of Regulatory Guide 8.15 are available for the Office of Standards Development, United States Nuclear Regulatory Commission, Washington, D.C. 20555, upon written request.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–24–030, filed 12/8/80; Order 1095, § 402–24–030, filed 2/6/76; Order 1, § 402–24–030, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-221-050 Exposure of minors.* (1) No licensee or registrant shall possess, use, or transfer sources of radiation in such a manner as to cause any individual within a restricted area, who is under 18 years of age, to receive in any period of one calendar quarter from all sources of radiation in such licensee's or registrant's

possession a dose in excess of 10 percent of the limits specified in the table in WAC 402-24-020(1).

- (2) No licensee shall possess, use, or transfer radioactive material in such a manner as to cause any individual within a restricted area, who is under 18 years of age, to be exposed to airborne radioactive material in an average concentration in excess of the limits specified in WAC 402-24-220, Appendix A, Table II, of this chapter. For purposes of this paragraph, concentrations may be averaged over periods not greater than a week.
- (3) The provisions of WAC 402-24-030 (2)(b) and (3) shall apply to exposures subject to WAC 402-24-035(2) except that the references in WAC 402-24-030 (2)(b) and (3) to Appendix A, Table I, Column 1 shall be deemed to be referenced to Appendix A, Table II, Column 1.

Note: *For determining the doses specified in this section, a dose from x- or gamma rays up to 10 MeV may be assumed to be equivalent to the exposure measured by a properly calibrated appropriate instrument in air at or near the body surface in the region of the highest dose rate.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–24–035, filed 12/8/80; Order 1095, § 402–24–035, filed 2/6/76.]

WAC 246-221-060 Permissible levels of radiation from external sources in unrestricted areas.*

Note: *It is the intent of this section to limit radiation levels so that it is unlikely that individuals in unrestricted areas would receive a dose to the whole body in excess of 0.5 rem in any calendar year. If in specific instances, it is determined by the department that this intent is not met, the department may, pursuant to WAC 402-12-170, impose such additional requirements on the licensee or registrant as may be necessary to meet the intent.

- (1) Except as authorized by the department pursuant to subsection (2) of this section, no licensee or registrant shall possess, use, or transfer sources of radiation in such a manner as to create in any unrestricted area from such sources of radiation in that person's possession:
- (a) Radiation levels which, if an individual were continuously present in the area, could result in the individual's receiving a dose in excess of two millirems in any one hour; or
- (b) Radiation levels which, if an individual were continuously present in the area, could result in the individual's receiving a dose in excess of one hundred millirems in any seven consecutive days.
- (2) Any person may apply to the department for proposed limits upon levels of radiation in unrestricted areas in excess of those specified in subsection (1) of this section resulting from the applicant's possession or use of sources of radiation. Such applications should include information as to anticipated average radiation levels and anticipated occupancy times for each unrestricted area involved. The department may approve the proposed limits if the applicant demonstrates to the satisfaction of the department that the proposed limits are not likely to cause any individual to receive a dose to the whole body in any period of one calendar year in excess of 0.5 rem and that the proposed limits are consistent with WAC 402-10-010.

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(3) In addition to other requirements of this part, licensees engaged in uranium fuel cycle operations subject to the provisions of 40 CFR Part 190, "Environmental Radiation Protection Standards for Nuclear Power Operation," shall comply with that part.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246-221-060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402-24-040, filed 12/11/86. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-24-040, filed 12/8/80; Order 1095, § 402-24-040, filed 2/6/76; Order 1, § 402-24-040, filed 1/8/69; Rules (part), filed 10/26/66.]

- WAC 246-221-070 Concentration in effluents released to unrestricted areas. (1) A licensee shall not possess, use, or transfer licensed material so as to release to an unrestricted area radioactive material in concentrations which exceed the limits specified in WAC 402-24-220, Appendix A, Table II, except as authorized pursuant to subsection (2) of this section. For purposes of this section concentrations may be averaged over a period not greater than one calendar year.
- (2) An application for a license or amendment may include proposed limits higher than those specified in subsection (1) of this section. The department will approve the proposed limits if the applicant demonstrates:
- (a) That the applicant has made a reasonable effort to minimize the radioactivity contained in effluents released to unrestricted areas; and
- (b) That it is not likely that radioactive material discharged in the effluent would result in the exposure of an individual to concentrations of radioactive material in air or water exceeding the limits specified in WAC 402–24–220, Appendix A, Table II.
- (3) An application for higher limits pursuant to subsection (2) of this section shall include information demonstrating that the applicant has made a reasonable effort to minimize the radioactivity discharged in effluents to unrestricted areas, and shall include, as pertinent:
- (a) Information as to flow rates, total volume of effluent, peak concentration of each radionuclide in the effluent, and concentration of each radionuclide in the effluent averaged over a period of one calendar year at the point where the effluent leaves a stack, tube, pipe, or similar conduit;
- (b) A description of the properties of the effluents, including:
 - (i) Chemical composition,
- (ii) Physical characteristics, including suspended solids content in liquid effluents, and nature of gas or aerosol for air effluents,
- (iii) The hydrogen ion concentrations (pH) of liquid effluents, and
- (iv) The size range of particulates in effluents released into air;
- (c) A description of the anticipated human occupancy in the unrestricted area where the highest concentration of radioactive material from the effluent is expected, and, in the case of a river or stream, a description of water uses downstream from the point of release of the effluent;

- (d) Information as to the highest concentration of each radionuclide in an unrestricted area, including anticipated concentrations averaged over a period of one calendar year:
 - (i) In air at any point of human occupancy, or
- (ii) In water at points of use downstream from the point of release of the effluent;
- (e) The background concentration of radionuclides in the receiving river or stream prior to the release of liquid effluent;
- (f) A description of the environmental monitoring equipment, including sensitivity of the system, and procedures and calculations to determine concentrations of radionuclides in the unrestricted area and possible reconcentrations of radionuclides; and
- (g) A description of the waste treatment facilities and procedures used to reduce the concentration of radionuclides in effluents prior to their release.
- (4) For the purposes of this section, the concentration limits in WAC 402-24-220, Appendix A, Table II of this part shall apply at the boundary of the restricted area. The concentration of radioactive material discharged through a stack, pipe or similar conduit may be determined with respect to the point where the material leaves the conduit. If the conduit discharges within the restricted area, the concentration at the boundary may be determined by applying appropriate factors for dilution, dispersion, or decay between the point of discharge and the boundary.
- (5) In addition to limiting concentrations in effluent streams, the department may limit quantities of radioactive material released in air or water during a specified period of time if it appears that the daily intake of radioactive material from air, water, or food by a suitable sample of an exposed population group, averaged over a period not exceeding one calendar year, would otherwise exceed the daily intake resulting from continuous exposure to air or water containing one—third the concentration of radioactive material specified in WAC 402–24–220, Appendix A, Table II.
- (6) In addition to the limits set in WAC 402-24-050(1) all radioactive emissions to the atmosphere must meet the requirements of chapter 402-80 WAC.
- (7) The provisions of this section do not apply to disposal of radioactive material into sanitary sewerage systems, which is governed by WAC 402-24-140.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–24–050, filed 12/11/86; Order 1095, § 402–24–050, filed 2/6/76; Order 1, § 402–24–050, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-221-080 Leak tests. (1) Each sealed radioactive source possessed under the provisions of a specific license, other than hydrogen-3 (tritium), with a half-life greater than thirty days and in any form other than gas, shall be tested and results obtained for leakage and/or contamination prior to initial use and at sixmonth intervals or as specified by the license. If there is reason to suspect that a sealed source might have been damaged, it shall be tested for leakage and results obtained before further use.

- (2) Leak tests shall be capable of detecting the presence of 0.005 microcurie of removable contamination. The results of leak tests made pursuant to WAC 402-24-060(1) shall be recorded in units of microcuries and shall be maintained for inspection by the department. Any test conducted pursuant to subsection (1) which reveals the presence of 0.005 microcurie or more of removable contamination shall be considered evidence that the sealed source is leaking. The licensee shall immediately withdraw the source from use and shall cause it to be decontaminated and repaired or to be disposed in accordance with WAC 402-19-400. If a sealed source shows evidence of leaking, a report shall be filed with the department within five days of the test, describing the equipment involved, the test results, and the corrective action taken. Where sealed sources are permanently mounted in devices or equipment, tests for contamination and leakage may be made by wiping appropriate accessible surfaces and measuring these wipes for transferred contamination.
- (3) Leak tests are required for sealed radioactive sources that are greater than 100 microcuries for beta and gamma emitters and greater than 10 microcuries for alpha emitters.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–24–060, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–24–060, filed 12/8/80; Order 1095, § 402–24–060, filed 2/6/76; Order 1, § 402–24–060, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-221-090 Personnel monitoring. (1) Each licensee or registrant shall supply appropriate personnel monitoring equipment to, and shall require the use of such equipment by:

(a) Each individual who enters a restricted area under such circumstances that the individual receives, or is likely to receive, a dose in any calendar quarter in excess of 25 percent of the applicable value specified in WAC 402-24-020(1).

- (b) Each individual under 18 years of age who enters a restricted area under such circumstances that the individual receives, or is likely to receive, a dose in any calendar quarter in excess of 5 percent of the applicable value specified in WAC 402-24-020(1).
 - (c) Each individual who enters a high radiation area.
- (2) Personnel monitoring devices assigned to an individual:
- (a) Shall not intentionally be exposed to give a false or erroneous reading;
- (b) Shall be assigned to one individual per exposure interval (i.e., weekly, monthly) and used to determine exposure for that individual only;
- (c) Shall not be worn by any individual other than that individual originally assigned to the device;

(d) Personnel monitoring devices that are exposed while not being worn by the assigned individual shall be processed and recorded as soon as possible. A replacement monitoring device shall be assigned to the individual immediately. A record of the circumstances of the exposure shall be retained.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–24–070, filed 12/8/80; Order 1095, § 402–24–070, filed 2/6/76; Order 708, § 402–24–070, filed 8/24/72; Order 1, § 402–24–070, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-221-100 Orders requiring furnishing bioassay services. Where necessary or desirable in order to aid in determining the extent of an individual's exposure to concentrations of radioactive material, the department may incorporate license provisions or issue an order requiring a licensee or registrant to make available to the individual appropriate bioassay services and to furnish a copy of the reports of such services to the department.

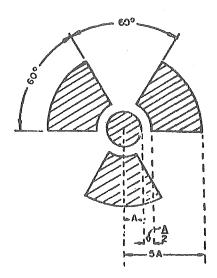
[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–100, filed 12/27/90, effective 1/31/91; Order 1095, § 402–24–080, filed 2/6/76; Order 1, § 402–24–080, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-221-110 Surveys. Each licensee or registrant shall make or cause to be made such surveys, as defined in WAC 402-12-050, as may be necessary for the licensee or registrant to establish compliance with these regulations and are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present. Records of such surveys shall be preserved as specified in WAC 402-24-170. Information on performing surveys may be found in the United States Nuclear Regulatory Commission's Regulatory Guide 8.23.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–24–085, filed 12/11/86; 83–19–050 (Order 2026), § 402–24–085, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–24–085, filed 12/8/80; Order 1095, § 402–24–085, filed 2/6/76.]

WAC 246-221-120 Caution signs, labels, and signals. (1) General.

- (a) Except as otherwise authorized by the department, symbols prescribed by this section shall use the conventional radiation caution colors (magenta or purple on yellow background). The symbol prescribed by this section is the conventional three-blade design: Radiation symbol
 - (i) Cross-hatch area is to be magenta or purple.
 - (ii) Background is to be yellow.



- (b) The conventional radiation symbol as described in (a) of this subsection shall be used only for:
- (i) Instructing individuals to be cognizant of a potential radiation hazard as prescribed in (c) through (j) of this subsection.
- (ii) Indicating that information presented pertains to the topic of radiation.
- (c) In addition to the contents of signs and labels prescribed in this section, a licensee or registrant may provide on or near such signs and labels any additional information which may be appropriate in aiding individuals to minimize exposure to radiation.
- (d) Each radiation area and entrance thereto shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: CAUTION* RADIATION AREA. However, in an exceptionally large room where other activities of a nonradiological nature are conducted the entrance need not be posted provided a conspicuous barricade with an appropriate number of signs is established to delineate the radiation area.

Note: *The word "DANGER" may be substituted for "CAUTION" on signs required by (d) through (h) of this subsection.

- (e) High radiation areas.
- (i) Each high radiation area and all entrances thereto shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: CAUTION* HIGH RADIATION AREA.
- (ii) Each entrance or access point to a high radiation area shall be:
- (A) Equipped with a control device which shall cause the level of radiation to be reduced below that at which an individual might receive a dose of one hundred millirems in one hour upon entry into the area; or
- (B) Equipped with a control device which shall energize a conspicuous visible or audible alarm signal in such a manner that the individual entering the high radiation area and the licensee or a supervisor of the activity are made aware of the entry; or

- (C) Maintained locked except during periods when access to the area is required, with positive control over each individual entry.
- (iii) The controls required by (e)(ii) of this subsection shall be established in such a way that no individual will be prevented from leaving a high radiation area.
- (iv) In the case of a high radiation area established for a period of thirty days or less, direct surveillance to prevent unauthorized entry may be substituted for the controls required by (e)(ii) of this subsection. Direct surveillance requires the continuous physical presence of an individual capable of taking all necessary precautions to prevent unwarranted exposure of individuals.
- (v) Any licensee or registrant may apply to the department for approval of methods not included in (e)(ii) and (iv) of this subsection for controlling access to high radiation areas. The department will approve the proposed alternatives if the licensee or registrant demonstrates that the alternative methods of control will prevent unauthorized entry into a high radiation area, and that the requirement of (e)(ii) of this subsection is met.
 - (vi) Very high radiation areas:
- (A) Each area in which there may exist radiation levels in excess of five hundred rems in one hour at one meter from a sealed radioactive source⁷ that is used to irradiate materials shall:
- (I) Have each entrance or access point equipped with entry control devices which shall function automatically to prevent any individual from inadvertently entering the area when such radiation levels exist; permit deliberate entry into the area only after a control device is actuated that shall cause the radiation level within the area, from the sealed source, to be reduced below that at which it would be impossible for an individual to receive a dose in excess of one hundred mrem in one hour; and prevent operation of the source if the source would produce radiation levels in the area that could result in a dose to an individual in excess of one hundred mrem in one hour. The entry control devices required by (e)(vi)(A) of this subsection shall be established in such a way that no individual will be prevented from leaving the area.
- (II) Be equipped with additional control devices such that upon failure of the entry control devices to function as required by (e)(vi)(A)(I) of this subsection the radiation level within the area, from the sealed source, shall be reduced below that at which it would be possible for an individual to receive a dose in excess of one hundred mrem in one hour; and visible and audible alarm signals shall be generated to make an individual attempting to enter the area aware of the hazard and the licensee or at least one other individual who is familiar with the activity and prepared to render or summon assistance, aware of such failure of the entry control devices;
- (III) Be equipped with control devices such that upon failure or removal of physical radiation barriers other than the source's shielded storage container the radiation level from the source shall be reduced below that at which it would be possible for an individual to receive a dose in excess of one hundred mrem in one hour; and visible and audible alarm signals shall be generated to

make potentially affected individuals aware of the hazard and the licensee or at least one other individual, who is familiar with the activity and prepared to render or summon assistance, aware of the failure or removal of the physical barrier. When the shield for the stored source is a liquid, means shall be provided to monitor the integrity of the shield and to signal, automatically, loss of adequate shielding. Physical radiation barriers that comprise permanent structural components, such as walls, that have no credible probability of failure or removal in ordinary circumstances need not meet the requirements of (e)(vi)(A)(III) of this subsection;

- (IV) Be equipped with devices that will automatically generate visible and audible alarm signals to alert personnel in the area before the source can be put into operation and in sufficient time for any individual in the area to operate a clearly identified control device which shall be installed in the area and which can prevent the source from being put into operation;
- (V) Be controlled by use of such administrative procedure and such devices as are necessary to assure that the area is cleared of personnel prior to each use of the source preceding which use it might have been possible for an individual to have entered the area;
- (VI) Be checked by a physical radiation measurement to assure that prior to the first individual's entry into the area after any use of the source, the radiation level from the source in the area is below that at which it would be possible for an individual to receive a dose in excess of one hundred mrem in one hour;
- (VII) Have entry control devices required in (e)(vi)(A)(I) of this subsection which have been tested for proper functioning prior to initial operation with such source of radiation on any day that operations are not uninterruptedly continued from the previous day or before resuming operations after any unintended interruption, and for which records are kept of the dates, times, and results of such tests of function. No operations other than those necessary to place the source in safe condition or to effect repairs on controls shall be conducted with such source unless control devices are functioning properly. The licensee shall submit an acceptable schedule for more complete periodic tests of the entry control and warning systems to be established and adhered to as a condition of the license;
- (VIII) Have those entry and exit portals that are used in transporting materials to and from the irradiation area, and that are not intended for use by individuals, controlled by such devices and administrative procedures as are necessary to physically protect and warn against inadvertent entry by any individual through such portals. Exit portals for processed materials shall be equipped to detect and signal the presence of loose radiation sources that are carried toward such an exit and to automatically prevent such loose sources from being carried out of the area.
- (B) Licensees with, or applicants for, licenses for radiation sources that are within the purview of (e)(vi)(A) of this subsection, and that must be used in a variety of positions or in peculiar locations, such as open fields or

- forests, that make it impracticable to comply with certain requirements of (e)(vi)(A) of this subsection, such as those for the automatic control of radiation levels, may apply to the department for approval, prior to use of safety measures that are alternative to those specified in (e)(vi)(C) of this subsection, and that will provide at least an equivalent degree of personnel protection in the use of such sources. At least one of the alternative measures must include an entry-preventing interlock control based on a physical measurement of radiation that assures the absence of high radiation levels before an individual can gain access to an area where such sources are used
- (f) Airborne radioactivity areas. Each airborne radioactivity area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: CAUTION* AIRBORNE RADIOACTIVITY AREA.
 - (g) Additional requirements.
- (i) Each area or room in which any radioactive material, other than natural uranium or thorium, is used or stored in an amount exceeding 10 times the quantity of radioactive material specified in Appendix B of this part shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: CAUTION* RADIOACTIVE MATERIAL.
- (ii) Each area or room in which natural uranium or thorium is used or stored in an amount exceeding one hundred times the quantity specified in Appendix B of this part shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: CAUTION* RADIOACTIVE MATERIAL.
 - (h) Containers and articles.
- (i) Except as provided in this section, each container of radioactive material shall bear a durable, clearly visible label identifying the radioactive contents.
- (ii) A label required pursuant to (h)(i) of this subsection shall bear the radiation caution symbol and the words: CAUTION* RADIOACTIVE MATERIAL. It shall also provide sufficient information to permit individuals handling or using the containers, or working in the vicinity thereof, to take precautions to avoid or minimize exposures.

As appropriate, the information will include radiation levels, kinds of material, estimate of activity, date for which activity is estimated.

- (i) Where containers are used for storage, the labels required in this subdivision shall state also the quantities and kinds of radioactive materials in the containers and the date of measurement of the quantities.
- (j) All radiation machines shall be labeled in a manner which cautions individuals that radiation is produced when the machine is being operated.
- (2) Notwithstanding the provisions of subsection (1)(h), (i) of this section labeling is not required:
- (a) For laboratory containers, such as beakers, flasks, and test tubes, used transiently in laboratory procedures when the person using such containers is present. For such containers a label identifying the radioactive contents is not required.

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- (b) For containers that do not contain radioactive material in quantities greater than the applicable quantities listed in WAC 402-24-230, Appendix B.
- (c) For containers containing only natural uranium or thorium in quantities no greater than ten times the applicable quantities listed in WAC 402-24-230, Appendix B.
- (d) For containers that do not contain radioactive material in concentrations greater than the applicable concentrations listed in WAC 402-24-220, Column 2, Table I, Appendix A.
- (e) For containers when they are attended by an individual who takes the precautions necessary to prevent the exposure of any individual to radiation or radioactive material in excess of the limits established by the regulations in this part;
- (f) For containers when they are in transport and packaged and labeled in accordance with regulations published by the United States Department of Transportation;
- (g) For containers which are accessible only to individuals authorized to handle or use them* or to work in the vicinity thereof, provided that the contents are identified to such individuals by a readily available written record;

Note: *For example, containers in locations such as water-filled canals, storage vaults, or hot cells.

- (h) For manufacturing and process equipment such as piping and tanks.
- (3) Each licensee, prior to disposal of an empty container which previously held radioactive material shall properly survey for contamination and remove or deface the radioactive material label or otherwise clearly indicate that the container no longer contains radioactive materials.

⁷This paragraph does not apply to radioactive sources that are used in teletherapy, in radiography, or in completely self-shielded irradiators in which the source is both stored and operated within the same shielding radiation barrier and, in the designed configuration of the irradiator, is always physically inaccessible to any individual and cannot create high levels of radiation in an area that is accessible to any individual. This paragraph also does not apply to sources from which the radiation is incidental to some other use nor to nuclear reactor generated radiation other than radiation from byproduct, source, or special nuclear materials that are used in sealed sources in nonself-shielded irradiators.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–120, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–24–090, filed 12/11/86. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–24–090, filed 12/8/80; Order 1095, § 402–24–090, filed 2/6/76; Order 1, § 402–24–090, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-221-130 Exceptions from posting and labeling requirements. Notwithstanding the provisions of WAC 402-24-090:

(1) Notwithstanding the requirements of WAC 402–36–140, a room or area is not required to be posted with a caution sign because of the presence of a sealed source, provided the radiation level 30.5 centimeters from the surface of the source container or housing does not exceed five millirem per hour.

- (2) Rooms or other areas in hospitals are not required to be posted with caution signs, and control of entrance or access thereto pursuant to WAC 402-24-090 (1)(c) is not required, because of the presence of patients containing less than 30 millicuries of radioactive material for whom hospitalization is not otherwise required. Provided that there are personnel in attendance who will take the precautions necessary to prevent the exposure of any individual to radiation or radioactive material in excess of the limits established in the regulations in this chapter.
- (3) Caution signs are not required to be posted in areas or rooms containing radioactive material for periods of less than eight hours provided that:
- (a) The material is constantly attended during such periods by an individual who shall take the precautions necessary to prevent the exposure of any individual to radiation or radioactive material in excess of the limits established in this part; and
- (b) Such area or room is subject to the licensee's or registrant's control.
- (4) A room or other area is not required to be posted with a caution sign, and control is not required for each entrance or access point to a room or other area which is used solely for the storage of radioactive material prepared for transport and packaged and labeled in accordance with regulations of the United States Department of Transportation.
- (5) Rooms with x-ray equipment may not be required to be posted with caution signs provided that access is controlled.
- (6) The interior of a teletherapy room is not required to be posted with caution signs provided such posting is conspicuously placed at the entrance(s) to the rooms.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–130, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–24–095, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–24–095, filed 12/8/80; Order 1095, § 402–24–095, filed 2/6/76.]

WAC 246-221-140 Instruction of personnel. Instructions required for individuals working in or frequenting any portion of a restricted area are specified in WAC 402-48-020, 402-48-030, and 402-48-040.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–140, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–24–110, filed 9/16/83; Order 1095, § 402–24–110, filed 2/6/76; Order 708, § 402–24–110, filed 8/24/72; Order 1, § 402–24–110, filed 7/2/71; Order 1, § 402–24–110, filed 1/8/69; Rules (part), filed 10/26/66.]

- WAC 246-221-150 Security and control of stored radioactive material. (1) Licensed materials shall be secured from, or controlled in such a manner so as to prevent unauthorized removal from the place of storage.
- (2) Licensed materials in an unrestricted area and not in storage shall be tended under the constant surveillance and immediate control of the licensee.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–150, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–24–120,

filed 9/16/83; Order 1095, § 402-24-120, filed 2/6/76; Order 1, § 402-24-120, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-221-160 Procedures for picking up, receiving, and opening packages. (1)(a) Each licensee or registrant who expects to receive a package containing quantities of radioactive material in excess of the Type A_1 or A_2 quantities specified in WAC 402-12-200 shall:

- (i) If the package is to be delivered to the licensee's or registrant's facility by the carrier, make arrangements to receive the package when it is offered for delivery by the carrier; or
- (ii) If the package is to be picked up by the licensee or registrant at the carrier's terminal, make arrangements to receive immediate notification from the carrier of the arrival of the package.
- (b) Each licensee or registrant who picks up a package of radioactive material from a carrier's terminal shall pick up the package expeditiously upon receipt of notification from the carrier of its arrival.
- (2)(a) Each licensee or registrant, upon receipt of a package of radioactive material, shall monitor the external surfaces of the package for radioactive contamination caused by leakage of the radioactive contents, except:
- (i) Packages containing less than one hundred times the quantity of nuclide(s) specified in WAC 402-19-550, Schedule B;
- (ii) Packages containing no more than 10 millicuries of radioactive material consisting solely of tritium, carbon-14, sulfur-35, or iodine-125;
- (iii) Packages containing only radioactive material as gases or in special form;
- (iv) Packages containing only radioactive material in other than liquid form (including Mo-99/Tc-99m generators) and not exceeding the Type A_1 or A_2 quantity limit specified in WAC 402-12-200; and
- (v) Packages containing only radionuclides with halflives of less than 30 days and a total quantity of no more than 100 millicuries.

The monitoring shall be performed as soon as practicable after receipt, but no later than three hours after the package is received at the licensee's facility if received during the licensee's normal working hours, or no later than three hours from the beginning of the next working day if received after normal working hours.

- (b) If removable radioactive contamination in excess of 0.01 microcurie (22,200 transformations per minute) per one hundred square centimeters of package surface is found on the external surfaces of the package, the licensee shall immediately notify by telephone, telegraph, mailgram or facsimile, the final delivering carrier, shipper and the department.
- (3)(a) Each licensee or registrant, upon receipt of a package containing quantities of radioactive material in excess of the Type A₁ or A₂ quantities specified in WAC 402-24-125(2), other than those transported by exclusive use vehicle, shall monitor the radiation levels external to the package. The package shall be monitored as soon as practicable after receipt, but no later than

three hours after the package is received at the licensee's facility if received during the licensee's normal working hours, and no later than three hours from the beginning of the next working day if received after normal working hours.

- (b) If radiation levels are found on the external surface of the package in excess of two hundred millirem per hour, or at one meter from the external surface of the package in excess of ten millirem per hour, the licensee or registrant shall immediately notify, by telephone, telegraph, mailgram or facsimile, the shipper, the final delivering carrier and the department.
- (4) Each licensee or registrant shall establish and maintain procedures for safely opening packages in which radioactive material is received, and shall assure that such procedures are followed and that due consideration is given to instructions for the type of package being opened and the monitoring of potentially contaminated packaging material (including packages containing radioactive material in gaseous form) to assure that only background levels of radiation are present prior to disposal of such material as nonradioactive waste. In addition, this shall include a wipe sample of the outside of any inner package which contains a liquid or dispersible radionuclide (radioactive wastes shall be exempted). Copies of such written procedures shall be retained for inspection by the department.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–160, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–24–125, filed 12/11/86; 83–19–050 (Order 2026), § 402–24–125, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–24–125, filed 12/8/80; Order 1095, § 402–24–125, filed 2/6/76.]

WAC 246-221-170 Waste disposal, general requirement. No licensee shall dispose of any radioactive material except:

- (1) By transfer to an authorized recipient as provided in WAC 402-19-400, or
- (2) As authorized pursuant to WAC 402-24-050, 402-24-135, 402-24-140, or 402-24-150.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–170, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–24–130, filed 12/8/80; Order 1095, § 402–24–130, filed 2/6/76; Order 1, § 402–24–130, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-221-180 Method of obtaining approval of proposed disposal procedures. Any person may apply to the department for approval of proposed procedures to dispose of radioactive material in a manner not otherwise authorized in this chapter. Each application shall contain a description of the radioactive material, including the quantities and kinds of radioactive material and levels of radioactivity involved, and the proposed manner and conditions of disposal. The application, where appropriate, shall also including an analysis and evaluation of pertinent information as with nature of the environment, including topographical, geological, meteorological, and hydrological characteristics; usage of ground and surface waters in the general area; the nature and

location of other potentially affected facilities; and procedures to be observed to minimize the risk of unexpected or hazardous exposures.

The department will not approve any application for a license to receive radioactive material from other persons for disposal on land not owned by a state or the federal government.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–180, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–24–135, filed 12/11/86; Order 1095, § 402–24–135, filed 2/6/76.]

WAC 246-221-190 Disposal by release into sanitary sewerage systems. No licensee shall discharge radioactive material into a sanitary sewerage system unless:

- (1) It is readily soluble or dispersible in water;
- (2) The quantity of any radioactive material released into the system by the licensee in any one day does not exceed the larger of:
- (a) The quantity which, if diluted by the average daily quantity of sewage released into the sewer by the licensee, will result in an average concentration not greater than the limits specified in WAC 402-24-220, Appendix A, Table I, Column 2; or
- (b) Ten times the quantity of such material specified in WAC 402-24-230, Appendix B of this part;
- (3) The quantity of any radioactive material released in any one month, if diluted by the average monthly quantity of water released by the licensee, will not result in an average concentration exceeding the limits specified in WAC 402-24-220 Appendix A, Table I, Column 2; and
- (4) The gross quantity of all radioactive material except hydrogen-3 and carbon-14 released into the sewerage system by the licensee does not exceed one curie (1Ci) per year. The amount released into the sewerage system for hydrogen-3 shall not exceed 5 curies per year and for carbon-14 shall not exceed 1 curie per year.

Excreta from individuals undergoing medical diagnosis or therapy with radioactive material shall be exempt from any limitations contained in this section: *Provided*, That the licensee provides for appropriate radiological monitoring whenever any waste line in the licensee's installation which may carry such excreta is opened.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–190, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–24–140, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–24–140, filed 12/8/80; Order 1095, § 402–24–140, filed 2/6/76; Order 1, § 402–24–140, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-221-200 Disposal by burial in soil. No licensee shall dispose of radioactive material by burial in soil except as specifically approved by the department pursuant to WAC 402-24-135.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–200, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–24–150, filed 12/8/80; Order 1095, § 402–24–150, filed 2/6/76; Order 1, § 402–24–150, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-221-210 Disposal by incineration. No licensee shall incinerate radioactive material for the purpose of disposal or preparation for disposal except as specifically approved by the department pursuant to WAC 402-24-050 and 402-24-135.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–210, filed 12/27/90, effective 1/31/91; Order 1095, § 402–24–160, filed 2/6/76; Order 1, § 402–24–160, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-221-220 Disposal of specific wastes. Any licensee may dispose of the following licensed material without regard to its radioactivity:

- (1) 0.05 microcuries or less of hydrogen-3 or carbon-14, per gram of medium, used for liquid scintillation counting; and
- (2) 0.05 microcuries or less of hydrogen-3 or carbon-14, per gram of animal tissue averaged over the weight of the entire animal: *Provided however*, Tissue may not be disposed under this section in a manner that would permit its use either as food for humans or as animal feed; and
- (3) Nothing in this section, however, relieves the licensee of maintaining records showing the receipt, transfer and disposal of such byproduct material as specified in WAC 402-12-080; and
- (4) Nothing in this section relieves the licensee from complying with other applicable federal, state and local regulations governing any other toxic or hazardous property of these materials.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246-221-220, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83-19-050 (Order 2026), § 402-24-165, filed 9/16/83.]

WAC 246-221-230 Records of surveys, radiation monitoring, and disposal. (1) Each licensee or registrant shall maintain records showing the radiation exposures of all individuals for whom personnel monitoring is required under WAC 402-24-070. Such records shall be kept on state of Washington current occupational external radiation exposure (Form RHF-5), in accordance with the instructions contained in that form, or on clear and legible records containing all the information required by Form RHF-5. The doses entered on the forms or records shall be for periods of time not exceeding one calendar quarter.

- (2) Each licensee or registrant shall maintain records in the same units used in this part, showing the results of surveys required by WAC 402-24-085 monitoring required by WAC 402-24-125, and disposals made under WAC 402-24-135 through 402-24-165.
- (3)(a) Records of individual exposure to radiation and to radioactive material which must be maintained pursuant to the provisions of subsection (1) of this section and records of bioassays, including results of whole body counting examinations made pursuant to WAC 402–24–080, shall be preserved indefinitely or until the department authorizes their disposal.
- (b) Records of the results of surveys and monitoring which must be maintained pursuant to subsection (2) of

this section shall be preserved for two years after completion of the survey except that the following records shall be maintained until the department authorizes their disposition:

- (i) Records of the results of surveys to determine compliance with WAC 402-24-030;
- (ii) In the absence of personnel monitoring data, records of the results of surveys to determine external radiation dose;
- (iii) Records of the results of surveys used to evaluate the release of radioactive effluents to the environment.
- (4) Records of disposal of licensed material made pursuant to WAC 402-24-135, 402-24-140, 402-24-150, 402-24-160, or 402-24-165 shall be maintained until the department authorizes their disposition.
- (5) Records which must be maintained pursuant to this part may be the original or a reproduced copy or microform if such reproduced copy or microform is duly authenticated by authorized personnel and the microform is capable of producing a clear and legible copy after storage for the period specified by department regulations.
- (6) If there is a conflict between the department's regulations in this part, license condition, or other written department approval or authorization pertaining to the retention period for the same type of record, the retention period specified in the regulations in this part for such records shall apply unless the department, pursuant to WAC 402-12-125, has granted a specific exemption from the record retention requirements specified in the regulations in this part.
- (7) The discontinuance or curtailment of activities does not relieve the licensee or registrant of responsibility for retaining all records required by this section. A licensee or registrant may, however, request the department to accept such records. The acceptance of the records by the department relieves the licensee or registrant of subsequent responsibility only in respect to their preservation as required in this section.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–230, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–24–170, filed 12/11/86; 83–19–050 (Order 2026), § 402–24–170, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–24–170, filed 12/8/80; Order 1095, § 402–24–170, filed 2/6/76; Order 708, § 402–24–170, filed 8/24/72; Order 1, § 402–24–170, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-221-240 Reports of theft or loss of radiation sources. Each licensee and/or registrant shall report immediately by telephone, 206/682-5327) and confirm promptly by letter to the State Department of Social and Health Services, Office of Radiation Protection, Mailstop LE-13, Olympia, Washington 98504, the actual or attempted theft or loss as soon as such theft or loss becomes known to the licensee and/or registrant of:

- (1) Any radiation-producing machine; or
- (2) Any quantity of radioactive material in excess of a quantity exempted under WAC 402-24-230, Appendix B, or any item not exempted in chapter 402-19 WAC.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–240, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–24–180, filed 12/11/86; 83–19–050 (Order 2026), § 402–24–180, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–24–180, filed 12/8/80; Order 1095, § 402–24–180, filed 2/6/76; Order 708, § 402–24–180, filed 8/24/72; Order 1, § 402–24–180, filed 7/2/71; Order 1, § 402–24–180, filed 1/8/69; Rules (part), filed 10/26/66.]

- WAC 246-221-250 Notification of incidents. (1) Immediate notification. Each licensee and/or registrant shall immediately notify the State Department of Social and Health Services, Office of Radiation Protection, Mailstop LE-13, Olympia, Washington 98504, by telephone 206/682-5327) and confirming letter of any incident involving any radiation source which may have caused or threatens to cause:
- (a) A dose to the whole body of any individual, or any dosimetry device assigned to any individual, of twenty-five rems or more of radiation; a dose to the skin of the whole body of any individual or any dosimetry device assigned to any individual of one hundred fifty rems or more of radiation; or a dose to the feet, ankles, hands, or forearms of any individual, or any dosimetry device assigned to any individual, of three hundred seventy-five rems or more of radiation; or
- (b) The release of radioactive material in concentrations which, if averaged over a period of twenty-four hours, would exceed five thousand times the limits specified for such materials in WAC 402-24-220, Appendix A, Table II.
- (2) Twenty-four hour notification. Each licensee and/or registrant shall within twenty-four hours notify the State Department of Social and Health Services, Office of Radiation Protection, Mailstop LE-13, Olympia, Washington 98504, by telephone 206/682-5327) and confirming letter of any incident involving any radiation source possessed which may have caused or threatens to cause:
- (a) A dose to the whole body of any individual, or any dosimetry device assigned to any individual, of five rems or more of radiation; a dose to the skin of the whole body of any individual or any dosimetry device assigned to any individual of thirty rems or more of radiation; or a dose to the feet, ankles, hands, or forearms or any dosimetry device assigned to any individual, of seventy—five rems or more of radiation; or
- (b) The release of radioactive material in concentrations which, if averaged over a period of twenty-four hours, would exceed five hundred times the limits specified for such materials in WAC 402-24-220, Appendix A, Table II; or
- (c) Exposure of any individual or personnel monitoring device(s) to quantities of radiation in excess of limits specified by WAC 402-24-020(1).
- (3) For each occurrence, requiring notification pursuant to this section, a prompt investigation of the situation shall be initiated by the licensee/registrant. A written report of the findings of the investigation shall be sent to the department within thirty days.

Any report filed with the department pursuant to this section shall be prepared in the manner described in WAC 402-24-200(2). Telephone notifications that do not involve immediate or twenty-four hour notification shall not be made to the emergency number (Seattle 206/682-5327). Routine calls should be made to the Olympia office (206/753-3468).

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246-221-250, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402-24-190, filed 12/11/86; 83-19-050 (Order 2026), § 402-24-190, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-24-190, filed 12/8/80; Order 1095, § 402-24-190, filed 2/6/76; Order 708, § 402-24-190, filed 8/24/72; Order 1, § 402-24-190, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-221-260 Reports of overexposures and excessive levels and concentrations. (1) In addition to any notification required by WAC 402-24-190, each licensee or registrant shall make a report in writing within 30 days to the department of each exposure of an individual to radiation level or concentrations of radioactive material in excess of any applicable limit as set forth in this part or as otherwise approved by the department.

- (2) Each report required by WAC 402-24-200(1) shall describe:
- (a) The extent of exposure of individuals to radiation or to radioactive material, including estimates of each individual's dose as required by WAC 402-24-200(3);
- (b) Levels of radiation and concentrations of radioactive material involved;
- (c) The cause of exposure, levels or concentrations;
- (d) Corrective steps taken or planned to assure against a recurrence.
- (3) Any report filed with the department pursuant to this section shall include for each individual exposed the name, social security number, and date of birth, and an estimate of the individual's dose. The report shall be prepared so that this information is stated in a separate part of the report.
- (4) Individuals shall be notified of reports in accordance with the requirements of WAC 402-48-040.
- (5) In addition to any notification required by WAC 402-24-190, each licensee shall make a report in writing within 30 days to the department of levels of radiation or releases of radioactive material in excess of limits specified by 40 CFR Part 190, "Environmental radiation protection standards for nuclear power operations," or in excess of license conditions related to compliance with 40 CFR Part 190. Each report required under this paragraph shall describe the extent of exposure of individuals to radiation or to radioactive material; levels of radiation and concentrations of radioactive material involved; the cause of the exposure, levels of concentrations; and corrective steps taken or planned to assure against a recurrence.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as 246–221–260, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–24–200, filed 12/8/80; Order 1095, § 402–24–200, filed 2/6/76; Order 708, § 402–24–200, filed 8/24/72; Order 1, § 402–24–200, filed 7/2/71; Order 1, § 402–24–200, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-221-270 Vacating premises. Each specific licensee shall, no less than 30 days before vacating or relinquishing possession or control of premises which may have been contaminated with radioactive material as a result of licensed activities, notify the department in writing of intent to vacate. When deemed necessary by the department, the licensee shall decontaminate the premises in such a manner as the department may specify.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as 246-221-270, filed 12/27/90, effective 1/31/91; Order 1095, § 402-24-210, filed 2/6/76; Order 1, § 402-24-210, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-221-280 Notifications and reports to individuals. (1) Requirements for notification and reports to individuals of exposure to radiation or radioactive material are specified in WAC 402-48-040.

(2) When a licensee or registrant is required pursuant to WAC 402-24-200 to report to the department any exposure of an individual or dosimetry device assigned to any individual to radiation from any source, the licensee or registrant shall also notify the individual. Such notice shall be transmitted at a time not later than the transmittal to the department, and shall comply with the provisions of WAC 402-48-040(1).

[Statutory Authority: RCW 43.70 040. 91–02–049 (Order 121), recodified as 246–221–280, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–24–215, filed 12/11/86; Order 1095, § 402–24–215, filed 2/6/76.]

WAC 246-221-290 Appendix A--Concentrations in air and water above natural background.

Element (atomic number)	Isotope 1	Restric Column 1 Air	ble I eted Area Column 2 Water (µCi/ml)	Unrestri Column 1 Air	Water
Actinium (89)	Ac-227 Ac-228	S 2x10 ⁻¹² I 3x10 ⁻¹¹ S 8x10 ⁻⁸ I 2x10 ⁻⁸	$ 6x10^{-5} 9x10^{-3} 3x10^{-3} 3x10^{-3} $	8x10 ⁻¹⁴ 9x10 ⁻¹³ 3x10 ⁻⁹ 6x10 ⁻¹⁰	$ 2x10^{-6} 3x10^{-4} 9x10^{-5} 9x10^{-5} $
Americium (95)		I 1x10 ⁻¹⁰ mS 6x10 ⁻¹² I 3x10 ⁻¹⁰	$ \begin{array}{c} 1 \times 10^{-4} \\ 8 \times 10^{-4} \\ 1 \times 10^{-4} \\ 3 \times 10^{-3} \end{array} $	$ 2x10^{-13} 4x10^{-12} 2x10^{-13} 9x10^{-12} $	4x10 ⁻⁶ 3x10 ⁻⁵ 4x10 ⁻⁶ 9x10 ⁻⁵
	Am-243	S 4x10 ⁻⁸ I 5x10 ⁻⁸ S 6x10 ⁻¹² I 1x10 ⁻¹⁰ S 4x10 ⁻⁶	4x10 ⁻³ 4x10 ⁻³ 1x10 ⁻⁴ 8x10 ⁻⁴ 1x10 ⁻¹	1x10 ⁻⁹ 2x10 ⁻⁹ 2x10 ⁻¹³ 4x10 ⁻¹² 1x10 ⁻⁷	1x10 ⁻⁴ 1x10 ⁻⁴ 4x10 ⁻⁶ 3x10 ⁻⁵ 5x10 ⁻³
Antimony (51)	Sb-122 Sb-124 Sb-125	S 2x10 ⁻⁵ S 2x10 ⁻⁷ I 1x10 ⁻⁷ S 2x10 ⁻⁷ S 2x10 ⁻⁸ I 2x10 ⁻⁸ S 5x10 ⁻⁷ I 3x10 ⁻⁸	8x10 ⁻⁴ 8x10 ⁻⁴ 8x10 ⁻⁴ 7x10 ⁻⁴ 7x10 ⁻⁴ 7x10 ⁻³ 3x10 ⁻³ 3x10 ⁻³	8x10 ⁻⁷ 6x10 ⁻⁹ 5x10 ⁻⁹ 5x10 ⁻⁹ 7x10 ⁻¹⁰ 2x10 ⁻⁸ 9x10 ⁻¹⁰	5x10 ⁻³ 3x10 ⁻⁵ 3x10 ⁻⁵ 3x10 ⁻⁵ 2x10 ⁻⁵ 2x10 ⁻⁵ 1x10 ⁻⁴ 1x10 ⁻⁴
Argon (18)	Ar–37Su Ar–41 Si	$b^2 6x10^{-3}$ ub $2x10^{-6}$	3X10	1x10 ⁻⁴ 4x10 ⁻⁸	
Arsenic (33)	As-73 As-74 As-76 As-77	S 2x10 ⁻⁶ I 4x10 ⁻⁷ S 3x10 ⁻⁷ I 1x10 ⁻⁷ S 1x10 ⁻⁷ I 1x10 ⁻⁷ S 5x10 ⁻⁷ I 4x10 ⁻⁷	1x10 ⁻² 1x10 ⁻² 2x10 ⁻³ 2x10 ⁻³ 6x10 ⁻⁴ 6x10 ⁻⁴ 2x10 ⁻³ 2x10 ⁻³	7x10 ⁻⁸ 1x10 ⁻⁸ 1x10 ⁻⁸ 1x10 ⁻⁹ 4x10 ⁻⁹ 4x10 ⁻⁹ 3x10 ⁻⁹ 2x10 ⁻⁸ 1x10 ⁻⁸	5x10 ⁻⁴ 5x10 ⁻⁵ 5x10 ⁻⁵ 5x10 ⁻⁵ 2x10 ⁻⁵ 2x10 ⁻⁵ 8x10 ⁻⁵ 8x10 ⁻⁵
Astatine (85)	At-211	$\frac{\text{S }7\text{x}10^{-9}}{1\ 3\text{x}10^{-8}}$	$5x10^{-5} \\ 2x10^{-3}$	$2x10^{-10}$ $1x10^{-9}$	$\begin{array}{c} 2x10^{-6} \\ 7x10^{-5} \end{array}$

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Element (atomic number)	Isotope 1	Restric	tble I cted Area Column 2 Water (µCi/ml)	Unrestr	Water	Element (atomic number)	Isotope ^l	Restric	ble I cted Area Column 2 Water (µCi/ml)	Unrestr	Water
Barium (56)	Ba-131 Ba-140	S 1x10 ⁻⁶ I 4x10 ⁻⁷ S 1x10 ⁻⁷ I 4x10 ⁻⁸	5x10 ⁻³ 5x10 ⁻³ 8x10 ⁻⁴ 7x10 ⁻⁴	4x10 ⁻⁸ 1x10 ⁻⁸ 4x10 ⁻⁹ 1x10 ⁻⁹	$ 2x10^{-4} 2x10^{-4} 3x10^{-5} 2x10^{-5} $		Co-58 Co-60	S 8x10 ⁻⁷ I 5x10 ⁻⁸ S 3x10 ⁻⁷ I 9x10 ⁻⁹	$4x10^{-3} 3x10^{-3} 1x10^{-3} 1x10^{-3}$	$ 3x10^{-8} 2x10^{-9} 1x10^{-8} 3x10^{-10} $	1x10 ⁻⁴ 9x10 ⁻⁵ 5x10 ⁻⁵ 3x10 ⁻⁵
Berkelium (97)	Bk-249 Bk-250	S 9x10 ⁻¹⁰ I 1x10 ⁻⁷ S 1x10 ⁻⁷	$ 2x10^{-2} 2x10^{-2} 6x10^{-3} 6x10^{-3} $	$3x10^{-11}$ $4x10^{-9}$ $5x10^{-9}$	$6x10^{-4}$ $6x10^{-4}$ $2x10^{-4}$	Copper (29)	Cu-64	$S 2x10^{-6} I 1x10^{-6} S 1x10^{-10} S 0$	$ \begin{array}{r} 1 \times 10^{-2} \\ 6 \times 10^{-3} \end{array} $ $ 7 \times 10^{-4} $	$7x10^{-8} 4x10^{-8} 4x10^{-12}$	$ 3x10^{-4} 2x10^{-4} 2x10^{-5} $
Beryllium (4)	Be-7	$\begin{array}{c} 3 & 1 \times 10^{-6} \\ 1 & 1 \times 10^{-6} \\ S & 6 \times 10^{-6} \\ 1 & 1 \times 10^{-6} \end{array}$	$ 6x10^{-3} 5x10^{-2} 5x10^{-2} $	$4x10^{-8}$ $2x10^{-7}$ $4x10^{-8}$	$ 2x10^{-4} 2x10^{-3} 2x10^{-3} $	Curium (96)	Cm-243	I 2x10 ⁻¹⁰ S 6x10 ⁻¹² I 1x10 ⁻¹⁰	$7x10^{-4}$ $1x10^{-4}$ $7x10^{-4}$	$ 6x10^{-12} 2x10^{-13} 2x10^{-12} $	2x10 ⁻⁵ 5x10 ⁻⁶ 2x10 ⁻⁵
Bismuth (83)	Bi-206 Bi-207	S 2x10 ⁻⁷ I 1x10 ⁻⁷ S 2x10 ⁻⁷	$ \begin{array}{r} 1 \times 10^{-3} \\ 1 \times 10^{-3} \\ 2 \times 10^{-3} \end{array} $	6x10 ⁻⁹ 5x10 ⁻⁹	$ 4x10^{-5} 4x10^{-5} 4x10^{-5} 6x10^{-5} $		Cm-245	S 9x10 ⁻¹² I 1x10 ⁻¹⁰ S 5x10 ⁻¹² I 1x10 ⁻¹⁰	2x10 ⁻⁴ 8x10 ⁻⁴ 1x10 ⁻⁴	$ 3x10^{-13} 3x10^{-12} 2x10^{-13} 4x10^{-12} $	$7x10^{-6}$ $3x10^{-5}$ $4x10^{-6}$ $3x10^{-5}$
	Bi-210	I 1x10 9 S 6x10 9	$2x10^{-3}$ $1x10^{-3}$	$5x10^{-10}$ $2x10^{-10}$	6x10 ⁻⁵ 4x10 ⁻⁵			S 5x10 ⁻¹² I 1x10 ⁻¹⁰ S 5x10 ⁻¹² I 1x10 ⁻¹⁰	1x10 ⁻⁴ 8x10 ⁻⁴ 1x10 ⁻⁴ 6x10 ⁻⁴	2x10 ⁻¹³ 4x10 ⁻¹² 2x10 ⁻¹³ 4x10 ⁻¹²	4x10 ⁻⁶ 3x10 ⁻⁶ 4x10 ⁻⁶
Bromine (35)	Bi-212 Br-82	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c} 1x10^{-2} \\ 1x10^{-2} \\ 1x10^{-3} \end{array} $	$ 3x10^{-9} \\ 7x10^{-9} \\ 4x10^{-8} $	$4x10^{-4} 4x10^{-4} 4x10^{-4} 3x10^{-4} -5$			S 6x10 ⁻¹³ I 1x10 ⁻¹¹ S 1x10 ⁻⁵	1x10 ⁻⁵ 4x10 ⁻⁵ 6x10 ⁻²	$2x10^{-14}$ $4x10^{-13}$	4×10^{-6} 1×10^{-6}
Cadmium (48)		I $2x10^{-7}$ S $5x10^{-8}$	1×10^{-3} 5×10^{-3}	$6x10^{-9}$ $2x10^{-9}$	4x10 ⁻⁵ 2x10 ⁻⁴	Dysprosium (66)	Dy-165	S 3x10 ⁻⁶ I 2x10 ⁻⁶	1x10 ⁻²	9x10 ⁻⁸	2x10 ⁻³ 4x10 ⁻⁴
		1 7x10 ⁻⁸ 1 4x10 ⁻⁸ 1 4x10 ⁻⁷ S 2x10 ⁻⁷ 1 2x10 ⁻⁷	7x10 ⁻⁴ 7x10 ⁻⁴ 7x10 ⁻³ 1x10 ⁻³	1x10 ⁻⁹ 1x10 ⁻⁹ 1x10 ⁻⁹ 8x10 ⁻⁹ 6x10 ⁻⁹	3x10 ⁻⁵ 3x10 ⁻⁵ 3x10 ⁻⁵ 4x10 ⁻⁵	Einsteinium (99)		$S 2x10^{-7}$ $I 2x10^{-7}$ $S 8x10^{-10}$	1×10^{-3} 1×10^{-4}	8x10 ⁻⁹ 7x10 ⁻⁹	4x10 ⁻⁵ 4x10 ⁻⁵
Calcium (20)	Ca-45 Ca-47	S 3x10 ⁻⁸ I 1x10 ⁻⁷ S 2x10 ⁻⁷ I 2x10 ⁻⁷	$ 3x10^{-4} 5x10^{-3} 1x10^{-3} 1x10^{-3} $	1x10 ⁻⁹ 4x10 ⁻⁹ 6x10 ⁻⁹ 6x10 ⁻⁹	9x10 ⁻⁶ 2x10 ⁻⁴ 5x10 ⁻⁵ 3x10 ⁻⁵		Es-254m Es-254	I 6x10 ⁻¹⁰ S 5x10 ⁻⁹ I 6x10 ⁻⁹ S 2x10 ⁻¹¹ I 1x10 ⁻¹⁰	7x10 ⁻⁴ 5x10 ⁻⁴ 5x10 ⁻⁴ 4x10 ⁻⁴	2x10 ⁻¹¹ 2x10 ⁻¹⁰ 2x10 ⁻¹⁰ 6x10 ⁻¹³ 4x10 ⁻¹²	2x10 ⁻⁵ 2x10 ⁻⁵ 2x10 ⁻⁵ 1x10 ⁻⁵
Californium (98)	Cf-249 Cf-250	$S 2x10^{-12}$ $I 1x10^{-10}$ $S 5x10^{-12}$	1×10^{-4} 7×10^{-4}	$5x10^{-14}$ $3x10^{-12}$	$4x10^{-6}$ $2x10^{-5}$ $1x10^{-5}$	Erbium (68)	Es-255 Er-169	S 5x10 ⁻¹⁰ I 4x10 ⁻¹⁰ S 6x10 ⁻⁷	$8x10^{-4}$ $8x10^{-4}$ $8x10^{-3}$	$ 2x10^{-11} \\ 1x10^{-11} \\ 2x10^{-8} $	$ 3x10^{-5} 3x10^{-5} 3x10^{-5} 9x10^{-5} $
	Cf-251	I 1x10 ⁻¹⁰ S 2x10 ⁻¹²	7x10 ⁻⁴ 1x10 ⁻⁴ 8x10 ⁻⁴	3x10 ⁻¹² 3x10 ⁻¹² 6x10 ⁻¹⁴ 3x10 ⁻¹² 2x10 ⁻¹³	3x10 ⁻⁵ 4x10 ⁻⁶ 3x10 ⁻⁵	Erbium (68)		I 4x10 ⁻⁷ S 7x10 ⁻⁷ I 6x10 ⁻⁷	$3x10^{-3}$ $3x10^{-3}$ $3x10^{-3}$ $3x10^{-3}$	$ \begin{array}{c} 1x10^{-8} \\ 2x10^{-8} \\ 2x10^{-8} \end{array} $	9x10 ⁻⁵ 1x10 ⁻⁴ 1x10 ⁻⁴
	Cf-252 Cf-253	S 6x10 ⁻¹² I 3x10 ⁻¹¹ S 8x10 ⁻¹⁰ I 8x10 ⁻¹⁰ I 8x10 ⁻¹² S 5x10 ⁻¹²	2x10 ⁻⁴ 2x10 ⁻⁴ 4x10 ⁻³ 4x10 ⁻³ 4x10 ⁻⁶	$3x10^{-11}$	7x10 ⁻⁶ 7x10 ⁻⁶ 1x10 ⁻⁴ 1x10 ⁻⁴	Europium (63)	$(T_r = 9.21)$	S 4x10 ⁻⁷ ars) I 3x10 ⁻⁷ S 1x10 ⁻⁸	$2x10^{-3} 2x10^{-3} 2x10^{-3}$	$1x10^{-8}$ $1x10^{-8}$ $4x10^{-10}$	6×10^{-5} 6×10^{-5} 8×10^{-5}
Carbon (6)	Cf-254 C-14 (COc)St	$\begin{array}{c} 3.310 \\ 1.5 \times 10^{-12} \\ \text{S} 4 \times 10^{-6} \\ \text{ab}^2 5 \times 10^{-5} \end{array}$	$4x10^{-6}$ $2x10^{-2}$	$ 2x10^{-13} 2x10^{-13} 2x10^{-7} 1x10^{-6} $	1x10 ⁻⁷ 1x10 ⁻⁷ 1x10 ⁻⁴		$(T_r=13y)$	rs) I $2x10^{-8}$ S $4x10^{-9}$ I $7x10^{-9}$	$ 2x10^{-3} \\ 6x10^{-4} \\ 6x10^{-4} $	$ 6x10^{-10} \\ 1x10^{-10} \\ 2x10^{-10} $	8x10 ⁻⁵ 2x10 ⁻⁵ 2x10 ⁻⁵
Cerium (58)	Ce-141	$S_{4x10^{-7}}^{-7}$	$3x10^{-3}$ $3x10^{-3}$ $1x10^{-3}$	$2x10^{-8}$ $5x10^{-9}$	9x10 ⁻⁵ 9x10 ⁻⁵ 4x10 ⁻⁵			S 9x10 ⁻⁸ I 7x10 ⁻⁸	6x10 ⁻³	$3x10^{-9}$ $3x10^{-9}$	2x10 -4 2x10-4
	Ce-144	S 3x10 ⁻⁷ 1 2x10 ⁻⁷ 1 2x10 ⁻⁸ S 1x10 ⁻⁸ I 6x10 ⁻⁹	3x10 ⁻⁴ 3x10 ⁻⁴	7x10 3x10 2x10 -10	4x10 ⁻⁵ 4x10 ⁻⁵ 1x10 ⁻⁵ 1x10 ⁻⁵	Fermium (100)	Fm-255	S 6x10 ⁻⁸ I 7x10 ⁻⁸ S 2x10 ⁻⁸ I 1x10 ⁻⁸	4x10 ⁻³ 4x10 ⁻³ 1x10 ⁻³ 1x10 ⁻³	$ 2x10^{-9} 2x10^{-9} 6x10^{-10} 4x10^{-10} $	$ 1x10^{-4} 1x10^{-4} 3x10^{-5} 3x10^{-5} $
Cesium (55)	Cs-131 Cs-134m	I 3x10 ⁻⁶ 1 S 4x10 ⁻⁵	$7x10^{-2}$ $3x10^{-2}$ $2x10^{-1}$ $3x10^{-2}$	4x10 ⁻⁷ 1x10 ⁻⁷ 1x10 ⁻⁶ 2x10 ⁻⁷ 1x10 ⁻⁹	2x10 ⁻³ 9x10 ⁻⁴ 6x10 ⁻³ 1x10 ⁻³	Fluorine (9)	Fm-256 F-18	S 3x10 ⁻⁹ I 2x10 ⁻⁹ S 5x10 ⁻⁶	$ 3x10^{-5} 3x10^{-5} 2x10^{-2} $	$ \begin{array}{c} 4x10 \\ 1x10^{-10} \\ 6x10^{-11} \end{array} $ $ \begin{array}{c} 2x10^{-7} \\ 2x10^{-8} \end{array} $	9x10 ⁻⁷ 9x10 ⁻⁷ 9x10 ⁻⁴
	Cs-134 Cs-135	S 4x10 ⁻⁸ I 1x10 ⁻⁸ S 5x10 ⁻⁷	$3x10^{-3}$ $1x10^{-3}$ $3x10^{-3}$	4x10 ⁻¹⁰	9x10 ⁻⁶ 4x10 ⁻⁵	Gadolinium (64)		I 3x10 ⁻⁶ S 2x10 ⁻⁷ I 9x10 ⁻⁸	$ \begin{array}{c} 2x10^{-2} \\ 1x10^{-2} \\ 6x10^{-3} \\ 6x10^{-3} \end{array} $	9x10 ⁻⁸ 8x10 ⁻⁹ 3x10 ⁻⁹	5x10 ⁻⁴ 2x10 ⁻⁴ 2x10 ⁻⁴
	Cs-136 Cs-137	I 9x10 ⁻⁸ S 4x10 ⁻⁷ I 2x10 ⁻⁷ S 6x10 ⁻⁸	7x10 ⁻³ 2x10 ⁻³ 2x10 ⁻³ 4x10 ⁻⁴	3x10 ⁻⁹ 1x10 ⁻⁸ 6x10 ⁻⁹ 2x10 ⁻⁹	2x10 ⁻⁴ 9x10 ⁻⁵ 6x10 ⁻⁵ 2x10 ⁻⁵	Gallium (31)	Gd-159 Ga-72	S 5x10 ⁻⁷ I 4x10 ⁻⁷ S 2x10 ⁻⁷	$ 2x10^{-3} 2x10^{-3} 1x10^{-3} $	2x10 ⁻⁸ 1x10 ⁻⁸ 8x10 ⁻⁹	8x10 ⁻⁵ 8x10 ⁻⁵ 4x10 ⁻⁵
Chlorine (17)	Cl-36	I 1x10 ⁻⁶ S 4x10 ⁻⁷ I 2x10 ⁻⁸	2x10 ⁻³ 2x10 ⁻³	5x10 ⁻¹⁰ 1x10 ⁻⁸ 8x10 ⁻¹⁰ 9x10 ⁻⁸	4x10 ⁻⁵ 8x10 ⁻⁵ 6x10 ⁻⁵	Germanium (32)	Ge-71	I $2x10^{-7}$ S $1x10^{-5}$ I $6x10^{-6}$	$ \begin{array}{r} 1x10^{-3} \\ 5x10^{-2} \\ 5x10^{-2} \end{array} $	$6x10^{-9}$ $4x10^{-7}$ $2x10^{-7}$	$4x10^{-5}$ $2x10^{-3}$ $2x10^{-3}$
Chromium (24)	Cl-38 Cr-51	$S 3x10^{-6}$ $I 2x10^{-6}$	1×10^{-2} 1×10^{-2} 5×10^{-2}	7x10 ⁻⁶	$4x10^{-4}$ $4x10^{-3}$	Gold (79)		S 1x10 ⁻⁶ I 6x10 ⁻⁷ S 3x10 ⁻⁷	$5x10^{-3}$ $4x10^{-3}$ $2x10^{-3}$	$4x10^{-8}$ $2x10^{-8}$	2x10 ⁻⁴ 1x10 ⁻⁴ 5x10 ⁻⁵
Cobalt (27)	Co-57	I $2x10^{-6}$ S $3x10^{-6}$	$4x10^{-2}$ $2x10^{-2}$	8x10 ⁻⁶	$2x10^{-3}$ $5x10^{-4}$		Au-199	S 1x10 ⁻⁶ I 8x10 ⁻⁷	5×10^{-3} 4×10^{-3}	4x10 ⁻⁸ 4x10 ⁻⁸ 3x10 ⁻⁸	5x10 ⁻³ 2x10 ⁻⁴ 2x10 ⁻⁴
	Co-58m	S 2x10 ⁻⁵ I 9x10 ⁻⁶	8x10 ⁻² 6x10 ⁻²	6x10 ⁻⁹ 6x10 ⁻⁷ 3x10 ⁻⁷	$ 3x10^{-3} 2x10^{-3} $	Hafnium (72)	Hf-181	S 4x10 ⁻⁸ I 7x10 ⁻⁸	$2x10^{-3} \\ 2x10^{-3}$	1×10^{-9} 3×10^{-9}	7x10 ⁻⁵ 7x10 ⁻⁵

(1990 Ed.)

Holmism (67) Ho-166 \$2.107 \$1.07	Inchange Ho-166 S. 2410	Element (atomic number)	Isotope 1	Restric	ble I sted Area Column 2 Water (µCi/ml)	Unrestr	Water	Element (atomic number)	Isotope ¹	Restric	ble I cted Area Column 2 Water (µCi/ml)	Unrestr Column 1 Air	ole II icted Area Column 2 Water (µCi/ml)
	12-10	Holmium (67)	Ho-166	S 2x10 ⁻⁷	9x10 ⁻⁴	7x10 ⁻⁹	3x10 ⁻⁵		Nd-149	S 2x10 ⁻⁶	8x10 ⁻³	6x10 ⁻⁸ 5x10 ⁻⁸	3x10 ⁻⁴
1909 1909				$1.2x10^{-7}$	$9x10^{-4}$	$6x10^{-9}$	$3x10^{-3}$	N (02)	N- 227				210-6
Indium (49) In-11m Savio 411 310 310 410 310 310 410 310 410 310 410 310 410 310 410 310 310 410 310 310 410 310 310 410 310	melum (49) 1-13m S 800° 410° 2310° 100° 310° 100° 310° 110° 3	Hydrogen (1)	H–3 Su	$\begin{array}{c} \text{S } 5 \text{x} 10^{-6} \\ \text{I } 5 \text{x} 10^{-6} \\ \text{b}^2 \ 2 \text{x} 10^{-3} \end{array}$	1x10 ⁻¹ 1x10 ⁻¹	2-10-/	$ 3x10^{-3} \\ 3x10^{-3} $	reptunium (93)		I 1x10 ⁻¹⁰ S 8x10 ⁻⁷	$9x10^{-4}$	$4x10^{-12}$	2 v 10
16-1146 Stude St	1-114 1-11	Indium (49)	In-113m	$S 8x10^{-6}$	$4x10^{-2}$		1×10^{-3}	Nickel (28)	Ni59		6-10-3	2×10-8	
12-1156 2-106 2-107 2-	12-10 1			I 7x10 ⁰	4v10-2	4 10-9	1x10 ⁻³	Tyleker (20)		I 8x10 ⁻⁷	6v10 ⁻²	3 v 10 -0	$2x10^{-3}$
In-115 & 2210° 110° 3810° 410° 410° 110° 3810° 410° 110° 3810° 410° 110° 3810° 410° 110° 3810° 410° 110° 3810° 410°	In 15 15 200 10 20 20 20 20 20 2			1.2x10 °			2x10 2x10 ⁻⁵		Ni-63	S 6x10 ⁻⁶	XVIII '	2×10 7	3×10^{-3}
In-11 Salid Sali	1-115 13 10 10 10 10 10 10 10		In-115m	$S 2x10^{-6}$	1 v 1 ∩ - 4	Ωv10 "	4v10 ⁻⁴		Ni-65	S 9x10 ⁻⁷	4v10 ³	3 v 10 ⁻⁰	1-10-4
Codine (53)	Define (\$3)			1 2x10 ° S 2x10 ⁻⁷	1x10 -3	6x10 ⁻⁹	0v10 ⁻³			1.5×10^{-7}	$3x10^{-3}$	$2x10^{-8}$	1×10^{-4}
Ledine (53)	Column (53)		111-113	I 3x10 ⁻⁸	$3x10^{-3}$	1x10 ⁻⁹	9x10 ⁻⁵	Niobium (41)	Nb-93m	$S 1x10^{-7}$	1×10^{-2}	$4x10^{-9}$	4×10 ⁻⁴
1-126 St. 10 St	1 12 10 10 13	Iodine (53)	I_125		4×10 ⁻⁵		210-7			I 2v10-1	1 v 10 ²	5 v 10 - 9	4-10-4
	1-12 S 810 S 10	Todine (55)		1 210	Z10 ⁻³	$6x10^{-9}$	A 10-4		Nb-95	S 5x10 7	$3x10^{-3}$	2x10 ⁻⁹	
1-31 Systo Sato	1 17 17 17 17 17 17 17		I-126	S 8x10 ⁻⁹	5 v 10 °	010-11	2v10'		Nb-97	S 6x10 ⁻⁰	$3x10^{-2}$	$2x10^{-7}$	0v/10-7
17810° 610° 2410° 2410° 0 0 0 0 185 5 5 5 2 10° 2410° 710° 710° 110°	1710		1_129	1 3x10 ° S 2x10 ⁻⁹	3x10 -5		9x10 -8			I 5x10 ⁻⁶	$3x10^{-2}$	$2x10^{-7}$	$9x10^{-4}$
1-13 S 9 kD 6 k10 S 10	1-31 S 98.10 S 10.7 S			1.7v10 °	6v:10 ⁻³	210-7	$2x10^{-4}$	Osmium (76)	Os-185	$S 5x10^{-7}$	$2x10^{-3}$	$2x10^{-8}$	7×10^{-5}
1-12 S. S. S. D	1-132 S 2110 S 210 S 310 S 3		I-131	C 0"10_2	6 v 10 ⁻³		3x10 ⁻⁷	` ,		I 5x10 ⁻⁶	2 10 - 3	2×10-9	7v10 ⁻³
19x10 2x10 2x1	1910 510 510 4 310 210 120		I-132						Os-191m	1 S 2x10 ° 1 9x10 -6	7v10 2	2 v 10 - /	2410
1-13 S S S C S S S C S S	1-31 S S S C 2 S S C 2 S S C 2 S S C 2 S S S S S S S S S			I 0v10 ⁻⁷	5v10 ⁻³	2 10-0	2v10 ⁻⁴		Os-191	C 1 v 10 -0	5v10 -	4×10 ⁻⁰	210-4
1-13 5 5 5 10 2 2 2 2 2 2 2 2 2	1-14 S S S S S S S S S		I-133	C 2v10 v	$2x10^{-4}$	4x10 -9	1x10 ⁻⁶			1.4x10 ⁻⁷	5v10 ⁻³	1 v 1 ∩ -0	2v10 ⁻⁹
Fig. 2 State 1 State 2 State	1-13 S 11 10 7 11 10 7 11 10 7 11 10 7 11 10 7 11 10 7 11 10 7 11 10 10		I-134	S 5x10 '	4 10-3	6x10 ⁻⁹	7v10 "		Os-193	S 4x10 1 3x10 ⁻⁷	2x10 ⁻³	9x10 ⁻⁹	5x10 ⁻⁵
First Firs	ridium (77)		-	I 3v10 ⁻⁰	2 · 10 -	1×10^{-7}	6v10 ⁻⁷		D1 100				
Iridium (77)	ridium (77)		I135	S 1x10 ⁻⁷		1x10 ⁻⁸	4x10 5 7x10 5	Palladium (46)		1.7×10^{-1}	8 v 10 - 3	3 v 10-8	3v10-4
		T	* 100						Pd-109	S 6x10 ⁻⁷	3 v 10 -	2 v 10 ⁻⁰	$9x10^{-5}$
Fig. 2 S S S S S S S S S	Ir-192 S Ix	Iridium (77)		1 410-/	5v10 ⁻³	4x10 8	2x10 -4			I 4x10 ⁻⁷	$2x10^{-3}$	1x10 ⁻⁶	
Ir-19	1 1 1 1 1 1 1 1 1 1		Ir-192	S 1v10"/	1 v 10 ⁻³	$4x10^{-9}$	$4x10^{-5}$	Phosphorus (15)	P-32	$S 7x10^{-8}$	$5x10^{-4}$	2×10^{-9}	$2x10^{-5}$
Table Tabl	ron (26)			1 3v10 °	1210	$9x10^{-10}$	4×10^{-3}			I 8x10 ⁻⁸	$7x10^{-4}$	$3x10^{-9}$	$2x10^{-3}$
Fe-55 S 9x10 ⁻⁷ 2x10 ⁻² 3x10 ⁻⁸ 8x10 ⁻⁴ Pt-193m S 7x10 ⁻⁶ 3x10 ⁻⁷ 2x10 ⁻⁷ 1x10 ⁻⁶ 7x10 ⁻² 3x10 ⁻⁸ 2x10 ⁻³ 3x10 ⁻⁸ 2x10 ⁻³ 1x10 ⁻⁶ 7x10 ⁻² 3x10 ⁻⁸ 2x10 ⁻³ 3x10 ⁻⁸ 2x10 ⁻³ 1x10 ⁻⁶ 1x10 ⁻⁷ 1x10 ⁻⁶ 1x10 ⁻⁷ 1x10 ⁻⁸ 1x10 ⁻⁷ 1x10 ⁻⁷ 1x10 ⁻⁸	ron (26)		1r-194	I 2x10 ⁻⁷	$9x10^{-4}$	5x10 ⁻⁹	3x10 3x10 ⁻⁵	Platinum (78)	Pt-191	$S 8x10^{-7}$	4×10^{-3}	$3x10^{-8}$	1×10^{-4}
Fe-59 S S S S S S S S S	Fe-59 Six10 7 x10 3 x10 9 x10 5 x10	I (04)	F. 66						D. 102	I 6x10 ⁻⁷	2 10-2	2-10-0	1×10^{-4}
Krypton (36) $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Fe-59 S x10 ⁻⁷ 2x10 ⁻³ 2x10 ⁻⁵	Iron (26)		I 1010-6	7 10 2	210-0	2110-3		Pt-193m	15v10 °		2-10-/	1.10
Krypton (36) Kr-85m Sub 2 6x10-6 Kr-85 Sub 1x10-5 Kr-85 Sub 1x10-5 Kr-85 Sub 1x10-6 Kr-85 Sub 1x10-6 Kr-85 Sub 1x10-6 Kr-85 Sub 1x10-6 Lanthanum (57)	Taylor T		Fe-59	S 1v10"	2210-3	5 10	6v10"		Pt-193	S 1x10 ⁻⁰	2 10 2	4 v 10 - 0	0v10-4
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				I 5x10 ⁻⁶	2x10 ³	2x10 [/]	5x10 ⁻³		Dt 107m	I 3x10 ⁻⁷	5x10 ⁻²	1x10 ⁻⁰	$2x10^{-3}$
Kr-85 Sub 1x10-6	Kr-85 Sub Ix10-6	Krypton (36)	Kr-85m	. 2 6					FL-19/111	1.5x10 ⁰	2.10 ~	210-/	
Kr-87 Sub 1x10 ⁻⁶	Kr-87 Sub 1x10^6		Kr_85 C	nh 1v1∩ ⁻⁵		3 10 - /			Pt-197	S 8 v 10 - '	1v10	3 v 1 ∩ 0	1 2 1 0 - 4
Lanthanum (57) La-140 S 2x10 ⁻⁷ 7x10 ⁻⁴ 5x10 ⁻⁹ 2x10 ⁻⁵ 1x10 ⁻⁷ 7x10 ⁻⁴ 5x10 ⁻⁹ 2x10 ⁻⁵ 1x10 ⁻⁷ 1x1	Anthanum (57) La-140 S 2x10 ⁻⁷ 7x10 ⁻⁴ 5x10 ⁻⁹ 2x10 ⁻⁵ Anthanum (57) La-140 S 2x10 ⁻⁷ 7x10 ⁻⁴ 5x10 ⁻⁹ 1 1x10 ⁻⁷ 7x10 ⁻⁴ 5x10 ⁻⁹ 2x10 ⁻⁵ Pu-240 S 2x10 ⁻¹² Pu-241 S 9x10 ⁻¹¹ 1 2x10 ⁻⁶ 1 1x10 ⁻⁷ 1 2x10 ⁻⁶ 1 2x10 ⁻⁶ 1 2x10 ⁻⁶ Pu-240 S 2x10 ⁻¹² 1 2x10 ⁻⁶ Pu-241 S 9x10 ⁻¹¹ 1 2x10 ⁻⁶ 1 2x10 ⁻⁶ Pu-242 S 2x10 ⁻¹² At 10 ⁻¹²		Kr=87 Si	uh lvin "		210-0							1310
Lead (82) $Pb = 203$ S 2×10^{-12} I 1×10^{-7} 7 1×10^{-4} 4x 10^{-7} 7x 10^{-4} 4x 10^{-7} 1x 10^{-7}	Autotium (71) Lu = 177 S (x 10 - 7) x 10 - 7) x 10 - 4 (x 10 - 7) x 10 - 7) x 10 - 7 (x 10 - 7)		Kr-88 S	ub 1x10 ⁻⁶		2x10 °		Plutonium (94)	Pu-238	$S 2x10^{-12}$	1x10 ⁻⁴	7×10^{-14}	$5x10^{-6}$
Lead (82) $\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Lead (82) Pb-203 S 3x10-6	Lanthanum (57)	La-140	$S 2x10^{-7}$	$7x10^{-4}$	$5x10^{-9}$	$2x10^{-5}$		Dn_230	S 2×10-12	1 v 1 ∩ - 7	Z-, 10-14	3x10 5 5x10 6
Lead (82) $\begin{array}{cccccccccccccccccccccccccccccccccccc$	Pb-203 S S S S S S C Pb-204 S S S S S S S S S			I 1x10	$7x10^{-7}$	4x10 ⁻⁷				I 4x 10 ⁻¹¹	8v10-7	1 v 10 - 12	3 v 1 ∩ /
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Pb-210 $S x_10^{-10} - 4x_10^{-6} - 4x_10^{-12} - 1x_10^{-7} - 12x_10^{-7} - 1x_10^{-10} - 5x_10^{-3} - 12x_10^{-6} - 1x_10^{-12} - 1x_10^{-6} - 1x_10^{-7} - $	Lead (82)	Pb-203	S 3v10 ⁻⁶	1×10^{-2}	$9x10^{-8}$	4×10^{-4}		Pu-240	S 2v In	1v10 '	6x10 11	5x10 ⁻⁶
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		Db 210	C 1v10-10	1×10^{-2}	410-14	1×10-/		Pu-241	S 9x10 ⁻¹¹	7v10-5	2 10 14	$2x10^{-4}$
Pb-212 S $2x10^{-6}$ 6x10 - 6x10 - 2x10 - 5	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			1 2 10-10	5v10-3	0-10-14	2v10 7			I 4v10 ⁻⁰	4v10 ~	1 v 1 () 1	1×10^{-3}
Lutetium (71)	Autetium (71) Lu-177 S 6×10^{-7} 3×10^{-3} 2×10^{-8} 1×10^{-4} 1×10^{-5} 1×1		Pb-212	S 2x10 °	6v10 7					I 4x10-11	010-7	1 - 10-12	3v10-5
Lutetium (71) Lu-177 S 6x10 ⁻⁷ 3x10 ⁻³ 2x10 ⁻⁸ 1x10 ⁻⁷ 15x10 ⁻⁷ 3x10 ⁻³ 2x10 ⁻⁸ 1x10 ⁻⁷ 1x10 ⁻⁷ 3x10 ⁻³ 2x10 ⁻⁸ 1x10 ⁻⁷ 1x10 ⁻⁷ 3x10 ⁻⁵ 1x10 ⁻⁷ 1x10 ⁻⁷ 3x10 ⁻⁷ 3x10 ⁻⁵ 1x10 ⁻⁷ 1x10 ⁻⁷ 3x10 ⁻⁷ 3x10 ⁻⁵ 1x10 ⁻⁸ 1x10	Autetium (71) Lu-177 S $6x10^{-7}$ 3x10 ⁻³ 2x10 ⁻⁸ 1x10 ⁻⁴ 15x10 ⁻⁷ 3x10 ⁻³ 2x10 ⁻⁸ 1x10 ⁻⁴ 1x10 ⁻⁴ 4x10 ⁻⁶ 1x10 ⁻⁴ 1x10 ⁻¹ 1x10 ⁻⁷ 1x10 ⁻⁷ 3x10 ⁻⁷ 1x10 ⁻⁷ 3x10 ⁻⁷ 1x10 ⁻⁷ 3x10 ⁻⁷ 1x10 ⁻⁷ 3x10 ⁻⁷ 1x10 ⁻⁸ 1x			1 2x10			2x10		Pu-243	S 2x10 ⁰	1 v 10 ²	6v10 ⁻⁰	3×10-4
Manganese (25) M_{0} = S_{0} =	Manganese (25) M_0 = 2 S $2x10^{-7}$ $1x10^{-3}$ $7x10^{-9}$ $3x10^{-5}$ $11x10^{-7}$ $9x10^{-4}$ $5x10^{-9}$ $3x10^{-5}$ $11x10^{-7}$ $9x10^{-4}$ $5x10^{-9}$ $3x10^{-5}$ $11x10^{-7}$ $9x10^{-4}$ $5x10^{-9}$ $3x10^{-5}$ $11x10^{-7}$ $9x10^{-4}$ $11x10^{-7}$ $11x$	Lutetium (71)	Lu-177	S 6x10 ⁻⁷	$3x10^{-3}$	$2x10^{-8}$	1x10 ⁻⁴			1 2x10 °	1v10	8~10 ⁻⁰	2 10 10
Manganese (25) Mn-52 S 2x10 - 7	Manganese (25) Mn-52 S 2x10 7								Pu-244	S 2x10 I 3x10 ⁻¹¹	3x10 ⁻⁴	1x10 ⁻¹²	4x10 1x10 ⁻⁵
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Manganese (25)	Mn-52	S 2x10 ⁻⁷	1×10^{-3}	$7x10^{-9}$	3x10 ⁻⁵	D-1	D- 210			2-10-11	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		Mn-54	C 4v10"'	4×10-3		1 v 10 ⁻⁴	Polonium (84)	P0-210	I 2x10 ⁻¹⁰	8x10 ⁻⁴	$7x10^{-12}$	$3x10^{-5}$
Mercury (80) $\begin{array}{cccccccccccccccccccccccccccccccccccc$	Mercury (80) $\begin{array}{cccccccccccccccccccccccccccccccccccc$			I 4v10 ⁻⁰	3 v 1 0 - 3	1 v 1 0 '	1 v 10 7	Datassium (10)	I/ 42				
Mercury (80) $H_{g-197mS} \ 7 \times 10^{-7} \ 6 \times 10^{-3} \ 3 \times 10^{-8} \ 2 \times 10^{-4} \ H_{g-197mS} \ 7 \times 10^{-7} \ 6 \times 10^{-3} \ 3 \times 10^{-8} \ 2 \times 10^{-4} \ H_{g-197mS} \ 7 \times 10^{-7} \ 5 \times 10^{-3} \ 3 \times 10^{-8} \ 2 \times 10^{-4} \ H_{g-197mS} \ 7 \times 10^{-7} \ 5 \times 10^{-3} \ 3 \times 10^{-8} \ 2 \times 10^{-4} \ H_{g-197mS} \ 7 \times 10^{-7} \ 5 \times 10^{-3} \ 3 \times 10^{-8} \ 2 \times 10^{-4} \ H_{g-197mS} \ 7 \times 10^{-6} \ 9 \times 10^{-3} \ 4 \times 10^{-8} \ 3 \times 10^{-4} \ H_{g-197mS} \ 7 \times 10^{-6} \ 9 \times 10^{-3} \ 4 \times 10^{-8} \ 5 \times 10^{-4} \ 1 \times 10^{-7} \ 1 \times 10^{-3} \ 1 \times 10^{-3} \ 1 \times 10^{-8} \ 5 \times 10^{-5} \ 1 \times 10^{-7} \ 1 \times 10^{-3} \ 1 \times 10^{-8} \ 5 \times 10^{-4} \ 1 \times 10^{-7} \ 1 \times 10^{-3} \ 1 \times 10^{-3} \ 1 \times 10^{-8} \ 5 \times 10^{-5} \ 1 \times 10^{-7} \ 1 \times 10^{-3} \ 1 \times 10^{-8} \ 1 \times 10^{-7} \ 1 \times 10^{-3} \ 1 \times 10^{-8} \ 4 \times 10^{-5} \ 1 \times 10^{-7} \ 1 \times 10^{-3} \ 1 \times 10^{-8} \ 4 \times 10^{-5} \ 1 \times 10^{-7} \ 1 \times 10^{-3} \ 1 \times 10^{-8} \ 4 \times 10^{-5} \ 1 \times 10^{-7} \ 1 \times 10^{-3} \ 1 \times 10^{-8} \ 4 \times 10^{-5} \ 1 \times 10^{-7} \ 1 \times 10^{-3} \ 1 \times 10^{-8} \ 4 \times 10^{-5} \ 1 \times 10^{-7} \ 1 \times 10^{-3} \ 1 \times 10^{-8} \ 4 \times 10^{-5} \ 1 \times 10^{-8} \ 4 \times 10^{-5} \ 1 \times 10^{-7} \ 1 \times 10^{-3} \ 1 \times 10^{-14} \ 1 \times 10^{-7} \ 1 \times 10^{-3} \ 3 \times 10^{-11} \ 2 \times 10^{-7} \ 1 \times 10^{-3} \ 3 \times 10^{-11} \ 2 \times 10^{-4} \ 1 \times 10^{-7} \ 1 \times 10^{-3} \ 3 \times 10^{-11} \ 2 \times 10^{-4} \ 1 \times 10^{-7} \ 1 \times 10^{-3} \ 3 \times 10^{-11} \ 2 \times 10^{-4} \ 1 \times 10^{-7} \ 1 \times 10^{-3} \ 3 \times 10^{-11} \ 2 \times 10^{-4} \ 1 \times 10^{-7} \ 1 \times 10^{-3} \ 3 \times 10^{-7} \ 1 \times 10^{-3} \ 3 \times 10^{-7} \ 1 \times 10^{-5} \ 1 \times 10^{-7} \ 1 \times 10^{-$	Mercury (80) $H_{g-197mS} \ 7x10^{-7} \ 6x10^{-3} \ 3x10^{-8} \ 2x10^{-4} \ Hg-197 \ S \ 1x10^{-6} \ 9x10^{-3} \ 3x10^{-8} \ 2x10^{-4} \ Hg-197 \ S \ 1x10^{-6} \ 9x10^{-3} \ 4x10^{-8} \ 3x10^{-4} \ Hg-197 \ S \ 1x10^{-6} \ 9x10^{-3} \ 4x10^{-8} \ 3x10^{-4} \ Hg-197 \ S \ 1x10^{-6} \ 9x10^{-3} \ 4x10^{-8} \ 3x10^{-4} \ Hg-197 \ S \ 1x10^{-6} \ 1x10^{-2} \ 9x10^{-8} \ 5x10^{-4} \ 1x10^{-7} \ 1x10^{-3} \ 1x10^{-3} \ 1x10^{-3} \ 1x10^{-8} \ 5x10^{-5} \ 1x10^{-7} \ 1x10^{-3} \ 1x10^{-3} \ 6x10^{-9} \ 5x10^{-5} \ 1x10^{-7} \ 1x10^{-3} \ 3x10^{-8} \ 1x10^{-7} \ 1x10^{-3} \ 3x10^{-8} \ 2x10^{-4} \ Hg-197 \ S \ 1x10^{-7} \ 1x10^{-3} \ 3x10^{-8} \ 1x10^{-7} \ 1x10^{-3} \ 3x10^{-8} \ 1x10^{-7} \ 1x10^{-3} \ 3x10^{-8} \ 2x10^{-4} \ Hg-197 \ S \ 1x10^{-7} \ 1x10^{-3} \ 1x10^{-3} \ 1x10^{-8} \ 4x10^{-5} \ Hg-197 \ S \ 1x10^{-7} \ 1x10^{-3} \ 1x10^{-3} \ 1x10^{-8} \ 4x10^{-5} \ Hg-197 \ S \ 1x10^{-7} \ 1x10^{-3} \ 1x10^{-3} \ 1x10^{-8} \ 4x10^{-5} \ Hg-197 \ S \ 1x10^{-7} \ 1x10^{-3} \ 1x10^{-3} \ 1x10^{-1} \ 1x10^{-5} \ Hg-197 \ S \ 1x10^{-5} \ 1x10^{-5} \ 1x10^{-7} \ 1x10^{-3} \ 1x10^{-3} \ 1x10^{-1} \ 1x10^{-5} \ Hg-197 \ S \ 1x10^{-5} \ 1x10^{-5} \ 1x10^{-5} \ 1x10^{-7} \ 1x10^{-3} \ 1x10^{-1} \ 1x10^{-5} \ 1$		Mn-56	S 8x10 '	4x1()		1x10 '	Potassium (19)	K-42	I 1x10 ⁻⁷	6x10 ⁻⁴	4x10 ⁻⁹	2x10 ⁻⁵
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	M (80)	Ha 107				2-10-4	Pracendumium (50)	Dr_1/12			7×10 ⁻⁹	3×10 ⁻⁵
	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	MCICUTY (80)		1.8x10 ⁻⁷	5×10 ⁻³	2 10-0	2×10 ⁻⁴	rascodymium (33)		1.2x10 ⁻⁷	0v10-4	5v10 ⁻⁹	2 v 10 - 3
	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		Hg-197	S 1x10 ⁻⁶	9v10	410 °			Pr-143	S 3x10-/	1 v 10 ⁻³	1 v 1 n °	5×10 ⁻³
Molybdenum (42) Mo-99 S 7×10^{-7} 5 $\times 10^{-3}$ 3 $\times 10^{-8}$ 2 $\times 10^{-5}$ 4 $\times 10^{-5}$ 1 $\times 10^{-7}$ 5 $\times 10^{-3}$ 3 $\times 10^{-8}$ 2 $\times 10^{-4}$ 4 $\times 10^{-5}$ 1 $\times 10^{-7}$ 1 $\times 10^{-3}$ 1 $\times 10^{-8}$ 4 $\times 10^{-5}$ 1 $\times 10^{-7}$ 1 $\times 10^{-3}$ 1 $\times 10^{-8}$ 4 $\times 10^{-5}$ 1 $\times 10^{-10}$ 2 $\times 10^{-3}$ 1 $\times 10^{-10}$ 2 $\times 10^{-5}$ 4 $\times 10^{-5}$	Molybdenum (42) Mo-99 S $7x10^{-7}$ S $x10^{-3}$ S $x10^{-9}$ S $x10^{-8}$ S $x10^{-9}$ S $x10^{-7}$ S $x10^{-3}$ S $x10^{-9}$ S $x10^{-7}$ S $x10^{-3}$ S $x10^{-9}$ S $x10^{-5}$ Holybdenum (60) Nd-144 S $x10^{-10}$ S $x10^{-$			1 3x10 ³ S 7x10 ⁸	5x10-4	9x10 ⁻⁹	5x10 ⁵						
Molybdenum (42) Mo-99 S 7×10^{-7} S 10^{-3} 3 10^{-8} 2 10^{-4} 4 10^{-5} Pm-149 S 10^{-7} 1 10^{-3} 1 10^{-3} 1 10^{-8} 4 10^{-5} Neodymium (60) Nd-144 S 10^{-10} 2 10^{-3} 3 10^{-10} 2 10^{-3} 3 10^{-12} 7 10^{-5} Protactinium (91) Pa-230 S 10^{-7} 1 10^{-3} 3 10^{-11} 2 10^{-4} 1 10^{-4} 1 10^{-8} 4 10^{-5} Protactinium (91) Pa-230 S 10^{-9} 7 10^{-3} 3 10^{-11} 2 10^{-4} 1 10^{-4} 1 10^{-8} 1	Molybdenum (42) Mo-99 S $7x10^{-7}$ S $x10^{-3}$ 3 $x10^{-8}$ 2 $x10^{-4}$ 4 $x10^{-5}$ Pm-149 S $x10^{-7}$ 1 $x10^{-3}$ 1 $x10^{-8}$ 4 $x10^{-5}$ Reodymium (60) Nd-144 S $x10^{-10}$ 2 $x10^{-3}$ 3 $x10^{-12}$ 7 $x10^{-5}$ Protactinium (91) Pa-230 S $x10^{-9}$ 7 $x10^{-3}$ 8 $x10^{-11}$ 2 $x10^{-4}$ 1 $x10^{-8}$ 8 $x10^{-11}$ 2 $x10^{-3}$ 1 $x10^{-8}$ 8 $x10^{-11}$ 2 $x10^{-4}$ 1 $x10^{-8}$ 8 $x10^{-12}$ 2 $x10^{-3}$ 1 $x10^{-13}$ 8 $x10^{-14}$ 9 Protactinium (91) Pa-230 S $x10^{-9}$ 7 $x10^{-3}$ 3 $x10^{-11}$ 2 $x10^{-4}$ 1 $x10^{-8}$ 8 $x10^{-9}$ 2 $x10^{-9}$ 3 $x10^{-12}$ 2 $x10^{-4}$ 1 $x10^{-14}$ 9 Protactinium (91) Pa-231 S $x10^{-12}$ 2 $x10^{-3}$ 3 $x10^{-11}$ 2 $x10^{-4}$ 1 $x10^{-14}$ 1 $x10^{-14$		11g-203	I 1x10 ⁻⁷	$3x10^{-3}$	4x10 ⁻⁹	1x10 ⁻⁴	Promethium (61)	Pm-147	S 6x10 ⁻⁸	$6x10^{-3}$	$2x10^{-9}$	$2x10^{-4}$
Neodymium (60) Nd-144 S $8x10^{-1}$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Molyhdenum (42)	Mo-99	S 7x10 ⁻⁷	5×10 ⁻³	2×10-8	2-10-4		Pm-149	S 3v10-1	1 v 10 ⁻³	1v10-0	4v10 ⁻³
Neodymium (60) Nd-144 S $8x10^{-11}$ 2 $x10^{-3}$ 3 $x10^{-12}$ 7 $x10^{-5}$ Protactinium (91) Pa-230 S $2x10^{-9}$ 7 $x10^{-3}$ 6 $x10^{-11}$ 2 $x10^{-4}$ 1 3 $x10^{-10}$ 2 $x10^{-3}$ 1 1 $x10^{-11}$ 8 $x10^{-5}$ 1 1 8 $x10^{-10}$ 7 $x10^{-3}$ 3 $x10^{-11}$ 2 $x10^{-4}$ 1 1 $x10^{-8}$ 8 $x10^{-5}$ 1 1 $x10^{-12}$ 2 $x10^{-5}$ 1 1 $x10^{-12}$ 1 1 $x10^{-12}$ 1 1 $x10^{-12}$ 1 $x10^{-12}$ 1 $x10^{-12}$ 1 $x10^{-12}$ 1 $x10^{-12}$ 1 $x10^{-12}$ 1 $x1$	Reodymium (60) Nd-144 S 8×10^{-11} 2x10 ⁻³ 3x10 ⁻¹² 7x10 ⁻⁵ Protactinium (91) Pa-230 S 2×10^{-9} 7x10 ⁻³ 6x10 ⁻¹¹ 2x10 ⁻⁴ 1 8×10^{-10} 2x10 ⁻⁴ 1 8×10^{-10} 3x10 ⁻¹³ 2x10 ⁻⁴ 1 8×10^{-10} 3x10 ⁻¹⁴ 2x10 ⁻⁴ Pa-231 S 1×10^{-12} 3x10 ⁻¹⁵ 4x10 ⁻¹⁴ 9x10 ⁻⁷		1110-77	I 2x10 ⁻⁷	1x10 ⁻³	$7x10^{-9}$	4x10 ⁻⁵			I 2x10 ⁻⁷	$1x10^{-3}$	$8x10^{-9}$	$4x10^{-5}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Neodymium (60)	Nd-144	S 8×10-11	2-10-3	2 10-12	7::10-5	Protactinium (91)	Pa-230	S 2×10 ⁻⁹	7×10^{-3}	6×10 ⁻¹¹	2×10-4
		(00)		1 3v10 ⁻¹⁰	2~10~3	110-11	8×10 ⁻³			I Ωv10 ⁻¹⁰	7×10 ⁻³	2+10-11	2 10 4
	I ZAIO ZAIO GAIO GAIO DAIO		Nd-147	S 4x10 ⁻⁷	2x10		6v10-		Pa-231	S 1x10 12 I 1x10 10	3x10 -4	4x10 14 4x10 12	9x10 '

Element (atomic number)	Isotope ¹	Restric Column 1 Air	ble I cted Area Column 2 Water ((Unrestri	Water	Element (atomic number)	Isotope 1	Restric Column 1 Air	ble I ted Area Column 2 Water (µCi/ml)	Unrestri	Water
	Pa-233	S 6x10 ⁻⁷	$4x10^{-3}$	$2x10_{-9}^{-8}$	1x10 ⁻⁴		Sr-92	S 4x10 ⁻⁷	2x10 ⁻³	2x10_8	$7x10^{-5}$
		I 2x10 ⁻⁷	3x10 ⁻³	6x10 '	1x10 ⁻⁴			I 3x10 ⁻⁷	$2x10^{-3}$	1x10 ⁻⁰	6x10 ⁻³
Radium (88)		$\begin{array}{c} S \ 2x10^{-9} \\ I \ 2x10_{-9}^{-10} \end{array}$	$2x10^{-5}$ $1x10^{-4}$	$6x10^{-11}$ $8x10^{-12}$	$7x10^{-7}$ $4x10^{-6}$	Sulfur (16)	S-35	$\frac{\text{S } 3x10^{-7}}{1\ 3x10^{-7}}$	$2x10^{-3}$ $8x10^{-3}$	9x10 ⁻⁹ 9x10 ⁻⁹	$6x10^{-5}$ $3x10^{-4}$
		S 5x10 1	7 10 10 1	2210 10	2v10 ⁻⁰	Tantalum (73)	Ta-182	$S 4x10^{-8}$	1×10^{-3}	1×10 ⁻⁹	$4x10^{-5}$ $4x10^{-5}$
	Ra-226	S 3x10 ⁻¹¹ 1 5x10 ⁻¹¹	2x10 ⁻⁴ 4x10 ⁻⁷ 9x10 ⁻⁴	$ 2x10^{-11} \\ 2x10^{-12} \\ 3x10^{-12} \\ 2x10^{-12} $	$5x10^{-6}$ $3x10^{-8}$ $3x10^{-5}$			I 2x10 ⁻⁸	1x10 ⁻³	$7x10^{-10}$	
	Ra-228	S 7v10-13	Qv10 [/]	$ 2x10^{-12} \\ 2x10^{-12} $	2v10 °	Technetium (43)	Tc-96m	I 3x10 ⁻³	$4x10^{-1}$ $3x10^{-1}$	$3x10^{-6}$ $1x10^{-6}$	1×10^{-2} 1×10^{-2}
		I 4x10 ''	$7x10^{-4}$	1x10 ⁻¹²	3x10 ⁻⁵		Tc-96	S 6x10 ⁻⁷ I 2x10 ⁻⁷	$3x10^{-3}$ $1x10^{-3}$	2x10 ⁻⁸ 8x10 ⁻⁹	1x10 ⁻⁴ 5x10 ⁻⁵
Radon (86)		S 3x10 ⁻⁷		1x10 ⁻⁸			Tc-97m	$S 2x10^{-9}$	1 x 10 ⁻²	8~1U ~	4v10 '
	Rn-222 ³	$\frac{1}{3} \frac{10^{-8}}{3 \times 10^{-8}}$		$3x10^{-9}$				I 2x10 ⁻⁷ S 1x10 ⁻⁵	5x10 ⁻²	5x10 ⁻⁷	2x10 3
Rhenium (75)	Re-183	$S_{3x10^{-6}}^{-6}$	$2x10^{-2}$	$9x10^{-8}$	$6x10^{-4}$ $3x10^{-4}$			I 3x10 ⁻⁷	2v10 ~		
	Re-186	I 2x10 ⁻⁷ S 6x10 ⁻⁷	$8x10^{-3}$ $3x10^{-3}$	5x10 ⁻⁹ 2x10 ⁻⁸	3x10 -5 9x10 -5 5x10 -5		Tc-99m	I 1x10	$2x10^{-1}$ $8x10^{-2}$	1x10 ⁻⁶ 1x10 ⁻⁷ 5x10 ⁻⁷	$6x10^{-3}$ $3x10^{-3}$
		$12x10^{-7}$ S $9x10^{-6}$	1×10^{-3} 7×10^{-2}	8x10 ⁻⁷	3v10 ⁻³		Tc-99	S 2x10 ⁻⁶ I 6x10 ⁻⁸	1×10^{-2} 5×10^{-3}	$7x10^{-8}$ $2x10^{-9}$	$3x10^{-4}$ $2x10^{-4}$
		I 5v10-'	4v10-2	2010	210_2	Tellurium (52)	Te-125m		$5x10^{-3}$	1×10-8	2×10 ⁻⁴
	Re-188	S 4x10 ⁻⁷ I 2x10 ⁻⁷	$2x10^{-3}$ $9x10^{-4}$	1x10 ⁻⁸ 6x10 ⁻⁹	$ 6x10^{-5} 3x10^{-5} $	Tenunum (32)		I 1x10-/	3√10 ⁻³		
Rhodium (45)	Rh-103n	n S 8x10 ⁻⁵	4×10^{-1}	3×10^{-6}	1×10^{-2} 1×10^{-2}		Te-127m	14x10 °	$2x10^{-3}$	5x10 9	6x10 ⁻⁵
		I 6x10 ⁻⁵ S 8x10 ⁻⁷	$3x10^{-1}$ $4x10^{-3}$	2x10 ⁻⁶ 3x10 ⁻⁸	1×10 ⁻⁴		Te-127	$\frac{\text{S }2\text{x}10^{-6}}{\text{I }9\text{x}10^{-7}}$	8x10 ⁻³ 5x10 ⁻³	6x10 ⁻⁸	3x10 .
	K11-103	I 5x10 ⁻⁷	$3x10^{-3}$	$2x10^{-8}$	1x10 ⁻⁴		Te-129m	S 8v10 ⁻⁰	1 v 1 ∩ - 3		
Rubidium (37)	Rb-86	$S 3x10^{-7}$	2×10^{-3}	1×10^{-8}	7×10 ⁻⁵		Te-129	1 3x10 ° S 5x10 ⁻⁶	6x10 ⁻⁷	1x10 ⁻⁹ 2x10 ⁻⁷ 1x10 ⁻⁷	2x10
	Rb87	1.7×10^{-8} S 5×10^{-7}	$7x10^{-4}$ $3x10^{-3}$	2x10 ⁻⁹ 2x10 ⁻⁸	$2x10^{-5}$ $1x10^{-4}$			I 4x10 ⁻⁰	$2x10^{-2}$ $2x10^{-3}$ $2x10^{-3}$	1 10-0	8x10_5
	110 07	I 7x10 ⁻⁸	5x10 ⁻³	2x10 ′	2x10		Te-131m	I 2v10"'	1 v 10 ⁻³		
Ruthenium (44)	Ru-97	$\frac{\text{S } 2\text{x}10^{-6}}{\text{I } 2\text{x}10^{-6}}$	1×10^{-2} 1×10^{-2}	$8x10^{-8}$ $6x10^{-8}$	$4x10^{-4}$ $3x10^{-4}$		Te-132	$\frac{\text{S } 2\text{x}10^{-7}}{\text{I } 1\text{x}10^{-7}}$	$9x10^{-4}$ $6x10^{-4}$	$7x10^{-9}$ $4x10^{-9}$	$3x10^{-5}$ $2x10^{-5}$
	Ru-103	S 5v10"'	2v10 2		2 - 10 -	Terbium (65)	Tb-160	S 1×10 ⁻⁷	1×10^{-3}	210-9	
		I 8x10 ⁻⁸ S 7x10 ⁻⁷	2x10 ⁻³	$3x10^{-8}$	8x10 5	Toroiam (65)	10 100	$13x10^{-8}$	1x10 ⁻³	1x10 ⁻²	$4x10^{-5}$ $4x10^{-5}$
		1.5×10^{-7} S 8×10^{-8}	$3x10^{-3}$ $4x10^{-4}$	2x10 ⁻⁸ 3x10 ⁻⁹	1x10 ⁻⁴ 1x10 ⁻⁵	Thallium (81)	T1-200	$S 3x10^{-6}$ $I 1x10^{-6}$	1×10^{-2} 7×10^{-3}	$9x10^{-8}$ $4x10^{-8}$	4x10 ⁻⁴ 2x10 ⁻⁴
	Ku-106	I 6x10 ⁻⁹	$3x10^{-4}$	$2x10^{-10}$	1x10 ⁻⁵		Tl-201	$S.2x10^{-6}$	9v10 ⁻³	7-10-0	3v10
Samarium (62)	Sm-147	$S 7x10^{-11}_{-10}$	2×10^{-3}	$2x10^{-12}$ $9x10^{-12}$	6x10 ⁻⁵			I 9x10 ⁻⁷ S 8x10 ⁻⁷	$5x10^{-3}$	3x10 ⁻³ 3x10 ⁻⁸	2x10 ⁻⁴
		I 3x10 ⁻¹⁰ S 6x10 ⁻⁸	$2x10^{-3}$ $1x10^{-2}$	2v10-9	$7x10^{-5}$ $4x10^{-4}$			I 2x10 ⁻⁷ S 6x10 ⁻⁷	$2x10^{-3}$ $3x10^{-3}$	8x10 ⁻⁹ 2x10 ⁻⁸	7x10 ⁻⁵ 1x10 ⁻⁴ 1x10 ⁻⁵
		I 1×10^{-7} S 5×10^{-7}	$ \begin{array}{c} 1x10^{-2} \\ 2x10^{-3} \\ \hline \end{array} $	5x10 ⁻⁸	4x10 ⁴		T1-204	I 3x10 ⁻⁸	$2x10^{-3}$	$9x10^{-10}$	$6x10^{-5}$
	2111-133	I 4x10 ⁻⁷	$2x10^{-3}$	1x10 ⁻⁸	8×10^{-5}	Thorium [(90)]	Th-227	$S 3x10^{-10}$	5x10 ⁻⁴	1×10^{-11}	$2x10^{-5}$
Scandium (21)	Sc-46	$S 2x10^{-7}$	1×10^{-3}	8×10^{-9} 8×10^{-10}	$4x10^{-5}$ $4x10^{-5}$		Th-228	$12x10^{-10}$ S $9x10^{-12}$	$5x10^{-4}$ $2x10^{-4}$	$ 6x10^{-12} \\ 3x10^{-13} $	2x10 ⁻⁵ 2x10 ⁻⁶ 7x10 ⁻⁶
	Sc-47	I 2x10 ⁻⁸ S 6x10 ⁻⁷	1×10^{-3} 3×10^{-3}	2v10 ⁻⁰	9x10			$I 6x10^{-12}$ S $2x10^{-12}$	4x10 ⁻⁴ 5x10 ⁻⁵	2x10 ⁻¹³ 8x10 ⁻¹⁴	1x10 5
	Sc-48	1 5x10 '	3x10 ⁻³ 8x10 ⁻⁴	2x10 ⁻⁹	9x10 ⁻⁵			1 1x10 ''	gvin '	3 4 1 /1 1 -2	2 1 1 1 2
		1 1 1 1 1 0	8x10 ⁻⁴	5x10 -	3x10			S 1x10 ⁻⁶ I 1x10 ⁻⁶	$7x10^{-3}$ $7x10^{-3}$ $7x10^{-3}$	$5x10^{-8}$ $4x10^{-8}$	2x10 ⁻⁴ 2x10 ⁻⁴ 2x10 ⁻⁶
Selenium (34)	Se-75	$\frac{\text{S }1\text{x}10^{-6}}{\text{I }1\text{x}10^{-7}}$	$9x10^{-3}$ $8x10^{-3}$	$4x10^{-8}$ $4x10^{-9}$	$3x10^{-4}$ $3x10^{-4}$		Th-232	S 3x10 ⁻¹¹ I 3x10 ⁻¹¹	5x10 ⁻³	1x10 ⁻¹²	2x10 5
CH (14)	Si-31	$S 6x10^{-6}$	$3x10^{-2}$	2x10 ⁻⁷		•	Th-natural	S 6x10	6v10 ~	2x10 ⁻¹² 2x10 ⁻¹²	2x10 ⁻⁶ 2x10 ⁻⁵ 2x10 ⁻⁵
Silicon (14)	31-31	I 1x10 ⁻⁶	$6x10^{-3}$	$3x10^{-8}$	$9x10^{-4}$ $2x10^{-4}$		Th-234	I 6x10 ⁻¹¹ S 6x10 ⁻⁸	6x10 ⁻⁴ 5x10 ⁻⁴	2010	$2x10^{-5}$ $2x10^{-5}$ $2x10^{-5}$
Silver (47)	Ag-105	5.6×10^{-7}	3x10 ⁻³	2×10-8	1x10 ⁻⁴ 1x10 ⁻⁴			I 3x10 ⁻⁶	$5x10^{-4}$	1x10 -	
		1 8x10 ⁻⁵	$3x10^{-3}$ $9x10^{-4}$	$3x10^{-9}$ $7x10^{-9}$	210-3	Thulium (69)	Tm-170	1 3x10 0	1×10^{-3} 1×10^{-3}	1x10 ⁻⁹ 1x10 ⁻⁹	$5x10^{-5}$ $5x10^{-5}$
		I 1x10 ⁻⁸ S 3x10 ⁻⁷	$9x10^{-3}$	3x10 ⁻¹⁰	210-2		Tm-171	$S 1x10^{-7}$ $I 2x10^{-7}$	1×10^{-2} 1×10^{-2} 1×10^{-2}	4x10 ⁻⁹ 8x10 ⁻⁹	5x10 ⁻⁴ 5x10 ⁻⁴
	Ag-III	$I 2x10^{-7}$	1x10 ⁻³	8x10	4x10 ⁻⁵ 4x10 ⁻⁵	T' (50)	C 112			1x10 ⁻⁸	
Sodium (11)	Na-22	$S 2x10^{-7}$	1×10^{-3}	$6x10^{-9}$	$4x10^{-5}$ $3x10^{-5}$	Tin (50)	Sn-113	I 5v10 ⁰	$2x10^{-3}$ $2x10^{-3}$	2v10 ⁷	$9x10^{-5}$ $8x10^{-5}$
	Na-24	I 9x10 ⁻⁹ S 1x10 ⁻⁶	$9x10^{-4}$ $6x10^{-3}$	$3x10^{-10}$ $4x10^{-8}$	3x10 -4 2x10 -5 3x10 -5		Sn-125	S 1x10 ⁻⁷ I 8x10 ⁻⁸	5x10 ⁻⁴ 5x10 ⁻⁴	4x10 ⁻⁹ 3x10 ⁻⁹	$2x10^{-5}$ $2x10^{-5}$ $2x10^{-5}$
		I 1x10 '	8x10 .	5x10 '		Tungsten (74)	W181	S 2x10 ⁻⁶	1×10 ⁻²	8-10-8	
Strontium (38)	Sr-85m	$\frac{\text{S }4\text{x}10^{-5}}{13\text{x}10^{-5}}$	$2x10^{-1}$ $2x10^{-1}$	1×10^{-6} 1×10^{-6}	$7x10^{-3}$ $7x10^{-3}$			I 1x10 ⁻⁷ S 8x10 ⁻⁷	$ \begin{array}{c} 1x10^{-2} \\ 4x10^{-3} \\ \hline \end{array} $	4-10-9	$4x10^{-4}$ $3x10^{-4}$ $1x10^{-4}$
	Sr-85	S 2x10"	3 v 1 ∩ ^{−3}	8x10 ⁻⁹ 4x10 ⁻⁹	1x10 ⁻⁴ 2x10 ⁻⁴			1 1v10 '	3v10 -	3x10 ⁻⁸ 4x10 ⁻⁹	1x10 ⁻⁴ 1x10 ⁻⁴
	Sr-89	I 1x10 ⁻⁷ S 3x10 ⁻⁸	$5x10^{-3}$ $3x10^{-4}$	4x10 3x10 ⁻¹⁰ 1x10 ⁻⁹	3v10 ⁻⁰		W-187	S 4x10 ⁻⁷ I 3x10 ⁻⁷	$2x10^{-3}$ $2x10^{-3}$	$2x10^{-8}$ $1x10^{-8}$	$7x10^{-5}$ $6x10^{-5}$
	Sr90	I 4x10 °	8x10 ⁻⁷	210-11	$3x10^{-3}$	Uranium (92)	U-230	$S.3x10^{-10}$	1×10^{-4}	1×10-11	5×10 ⁻⁶
	Sr-91	I 5x10 ⁻⁷	1×10^{-3}	2x10 ⁻⁸	$4x10^{-3}$, ,		I 1x10 ⁻¹⁰	1x10 ⁻⁴ 8x10 ⁻⁴	4x10 ⁻¹²	5x10 ⁻⁶ 3x10 ⁻⁵
	∪ι~91	I 3x10 ⁻⁷	1x10 ⁻³	9x10 ⁻⁹	5x10 ⁻⁵		J232	I 3x10 ⁻¹¹	8x10 ⁻⁴	$9x10^{-13}$	$3x10^{-5}$

		Ta	ble I	Tab	ole II
Element (atomic	Isotope ¹	Column 1 Air	cted Area Column 2 Water	Column 1 Air	Water
number)		(μCi/ml)	(μCi/ml)		
	U-233	$S 5x10^{-10}$	9×10^{-4}	2x10 ⁻¹¹	$3x10^{-5}$
	U-234	$\begin{array}{c} I 1x10^{-10} \\ S^4 6x10^{-10} \end{array}$	9x10 ⁻⁴ 9x10 ⁻⁴ 9x10 ⁻⁴	$ 4x10^{-12} 2x10^{-11} 4x10^{-12} 4x10^{-11} $	$3x10^{-5}$ $3x10^{-5}$ $3x10^{-5}$ $3x10^{-5}$
	U-235	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	8×10-4	2v10_1,	3x10 ⁻⁵
	U-236	1 1x10 10	8x10 ⁻⁷ 1x10 ⁻³	4x10 ⁻¹²	3x10 ⁻⁵
	U-238	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1x10 ⁻³ 1x10 ⁻³	$4x10^{-12} 3x10^{-12} 5x10^{-12}$	3x10 ⁻⁵ 4x10 ⁻⁵
	U-240	1 1X10 7	1×10^{-3} 1×10^{-3} 1×10^{-3}	2 v 1 n ′	4x10 ⁻⁵ 3x10 ⁻⁵
	U-Natural	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1×10^{-3} 1×10^{-3} 1×10^{-3}	6x10 ⁻⁹ 5x10 ⁻¹² 5x10 ⁻¹²	$ 3x10^{-5} 3x10^{-5} 3x10^{-5} $
Vanadium (23)	V-48	$S 2x10^{-7}$ $I 6x10^{-8}$	$9x10^{-4}$ $8x10^{-4}$	$6x10^{-9}$ $2x10^{-9}$	$3x10^{-5} \\ 3x10^{-5}$
Xenon (54)	Xe-131r Si	n ub ² 2x10 ⁻⁵		4x10 ⁻⁷	
	Xe-133r			3x10 ⁻⁷	
	Xe-133	Sub 1x10 ⁻⁵		$3x10^{-7}$	
	Xe-135	Sub 4x10 ⁻⁶		1x10 ⁻⁷	
V44hiv (70)		7	$3x10^{-3}$	$2x10^{-8}$	1x10 ⁻⁴
Ytterbium (70)	Yb-175	I 6x10 ⁻⁷	$3x10^{-3}$	2x10 ⁻⁶	1x10 ⁻⁴
Yttrium (39)	Y-90	$S_1 \times 10^{-7}$ $I_1 \times 10^{-7}$	6x10 ⁻⁴ 6x10 ⁻⁴	$4x10^{-9}$	$2x10^{-5}$ $2x10^{-5}$
	Y-91m	S 2x10 ⁻³	1v10 '	3x10 ⁻⁹ 8x10 ⁻⁷ 6x10 ⁻⁷	3x10-3
	V or	$I 2x10^{-5}$ S $4x10^{-8}$	1x10 ⁻¹ 8x10 ⁻⁴	6x10 ⁻⁷ 1x10 ⁻⁹	3x10 ⁻³ 3x10 ⁻⁵
	Y-91	13x10 ⁻⁸	8v10 7	1410	3x10 ⁻³
	Y-92	S 4x10 ⁻⁷	$2x10^{-3}$	1 v 1 () ~	6x10 ⁻³
	Y-93	1 3x10 ⁻⁷ S 2x10 ⁻⁷	$2x10^{-3}$ $8x10^{-4}$	1x10 ⁻⁸ 6x10 ⁻⁹	6x10 ⁻⁵ 3x10 ⁻⁵
	1-93	1 1x10 ⁻⁷	8x10 ⁻⁴	5x10 ⁻⁹	$3x10^{-5}$
Zinc (30)	Zn-65	$\frac{\text{S } 1 \times 10^{-7}}{1.6 \times 10^{-8}}$	$3x10^{-3}$ $5x10^{-3}$	$4x10^{-9}$ $2x10^{-9}$	1×10^{-4} 2×10^{-4}
	Zn-69m	S 4x10 ⁻⁷ 1 3x10 ⁻⁷	$2x10^{-3}$ $2x10^{-3}$	1x10 ⁻⁸ 1x10 ⁻⁸	7x10 ⁻⁵ 6x10 ⁻⁵
	Zn-69	S 7x10 ⁻⁶ I 9x10 ⁻⁶	$5x10^{-2}$ $5x10^{-2}$ $5x10^{-2}$	2x10 ⁻⁷ 3x10 ⁻⁷	$2x10^{-3}$ $2x10^{-3}$
Zirconium (40)	Zr93	$S 1 \times 10^{-7}$	$2x10^{-2}$	4×10 ⁻⁹	8x10 ⁻⁴
Zircomuni (10)	Zr-95	I 3x10 ⁻⁷ S 1x10 ⁻⁷	$2x10^{-2}$	1x10 ⁻⁶	8x10 ⁻⁴ 6x10 ⁻⁵
	21-93	I 3x10 ⁻⁰	2x10 ⁻³	1v10 ⁻⁷	6x10 ⁻³
	Zr–97	S 1x10 ⁻⁷ I 9x10 ⁻⁸	$5x10^{-4}$ $5x10^{-4}$	4x10 ⁻⁹ 3x10 ⁻⁹	2x10 ⁻⁵ 2x10 ⁻⁵
Any single radion listed above we mode other the emission or spont sion and with re half-life less than	ith decay an alpha aneous fis- adioactive	ub ² 1x10 ⁻⁶		3x10 ⁻⁸	
Any single radion listed above we mode other the emission or spont sion and with rhalf-life greater hours.	ith decay an alpha aneous fis- adioactive	3x10 ⁻⁹	9x10 ^{~5}	1x10 ⁻¹⁰	3x10 ⁻⁶
Any single radior	nuclide not				
listed above, whi	ich decays				
neous fission.	or spointa-	6x10 ⁻¹³	4x10 ⁻⁷	2x10 ⁻¹⁴	3x10 ⁻⁸
-	-				

For purposes of these regulations, the designation 10-(number), indicates 10 raised to the minus (number) power.*

Notes: ¹Soluble (S); Insoluble (I).

²"Sub" means that values given are for submersion in a semispherical infinite cloud of airborne material.

³For purposes of these regulations, it may be assumed that the daughter activity concentrations in the following table are equivalent to an air concentration of 10⁻⁷ microcuries of radon-222 per milliliter of air in equilibrium with the daughters RaA, RaB, RaC, and RaC':

Alpha-Emitting Daughter Activity Collected Per Milliliter of Air

Maximum Time Between Collec- tion and Measurement (hours) ^a	Microcuries/ml	Total alpha disintegra— tions per minute per ml
0.5	7.2 x 10 ⁻⁸	0.16
1.0	4.5×10^{-8}	0.10
2.0	1.3 x 10 ⁻⁸	0.028
3.0	0.3 x 10	0.0072

^a The duration of sample collection and the duration of measurement should be sufficiently short compared to the time between collection and measurement, as not to have a statistically significant effect upon the results.

 $^4\mathrm{For}$ soluble mixtures of U-238, U-234 and U-235 in air chemical toxicity may be the limiting factor. If the percentage by weight (enrichment) of U-235 is less than 5, the concentration value for a 40-hour work week, Table I, is 0.2 milligrams uranium per cubic meter of air average. For any enrichment, the product of the average concentration and time of exposure during a 40-hour work week shall not exceed 8×10^{-3} SA $\mu\mathrm{Ci-hr/ml}$, where SA is the specific activity of the uranium inhaled. The concentration value for Table II is 0.007 milligrams uranium per cubic meter of air. The specific activity for natural uranium is 6.77×10^{-7} curies per gram U. The specific activity for other mixtures of U-238, U-235 and U-234, if not known, shall be:

SA=
$$3.6 \times 10^{-7}$$
 curies/gram U
U-depleted
SA = $(0.4 + 0.38 \text{ E} + 0.0034 \text{ E}^2) 10^{-6}$
E ≥ 0.72

where E is the percentage by weight of U-235, expressed as percent.

Note: In any case where there is a mixture in air or water of more than one radionuclide, the limiting values for purposes of this Appendix should be determined as follows:

1. If the identity and concentration of each radionuclide in the mixture are known, the limiting values should be derived as follows: Determine, for each radionuclide in the mixture, the ratio between the quantity present in the mixture and the limit otherwise established in Appendix "A" for the specific radionuclide when not in a mixture. The sum of such ratios for all the radionuclides in the mixture may not exceed "1" (i.e., "unity")

Example: If radionuclides a, b, and c are present in concentrations C_a , C_b , and C_c , and if the applicable MPC's are MPC_a, MPC_b, and MPC_c respectively, then the concentrations shall be limited so that the following relationship exists:

$$\frac{C_a}{MPC_a} + \frac{C_b}{MPC_b} + \frac{C_c}{MPC_c} \leq 1$$

 If either the identity or the concentration of any radionuclide in the mixture is not known, the limiting values for purposes of Appendix "A" shall be:

a. For purposes of Table I, Col. 1	$6x10^{-13}$
b. For purposes of Table I, Col. 2	$4x10^{-1}$
c. For purposes of Table II, Col. 1	
d. For nurposes of Table II. Col. 2	$3x10^{-8}$

- 3. If any of the conditions specified below are met, the corresponding values specified below may be used in lieu of those specified in paragraph 2, above.
 - a. If the identity of each radionuclide in the mixture is known but the concentration of one or more of the radionuclides in the mixture is not known, the concentration limit for the mixture is the limit specified in Appendix "A" for the radionuclide in the mixture having the lowest concentration limit; or
 - b. If the identity of each radionuclide in the mixture is not known, but it is known that certain radionuclides specified in Appendix "A" are not present in the mixture, the concentration limit for the mixture is the lowest concentration limit specified in Appendix "A" for any radionuclide which is not known to be absent from the mixture; or

Table I

Table II

c. Radionuclide

		ed Area Column 2 Water (µCi/ml)	Air	Column 2 Water
If it is known that Sr-90, I-125, I-126, I-129, I-131, (I-133 Table II only), Pb-210, Po-210, At-211, Ra-223, Ra-224, Ra-226, Ac-227, Ra-228, Th-230, Pa-231, Th-232, Th-nat, Cm-248, Cf-254, and Fm-256 are not present		9x10 ⁻⁵		3x10 ⁻⁶
If it is known that Sr-90, I-125, I-126, I-129, (I-131, I-133, Table II only), Pb-210, Po-210, Ra-223, Ra-226, Ra-228, Pa-231, Th-nat, Cm-248, Cf-254, and Fm-256 are not present	****	6x10 ⁻⁵		2x10 ⁻⁶
If it is known that Sr-90, I-129 (I-125, I-126, I-131, Table II only), Pb-210, Ra-226, Ra-228, Cm-248, and Cf-254 are not present		2x10 ⁻⁵		6x10 ⁻⁷
If it is known that (I-129, Table II only), Ra-226, and Ra-228 are not present		$3x10^{-6}$	•	1x10 ⁻⁷
If it is known that alpha-emitters and Sr-90, I-129, Pb-210, Ac-227, Ra-228, Pa-230, Pu-241, and Bk-249 are not present ——	3x10 ⁻⁹		1x10 ⁻¹⁰	
If it is known that alpha-emitters and Pb-210, Ac-227, Ra-228, and Pu-241 are not present —	3x10 ⁻¹⁰		1x10 ⁻¹¹	
If it is known that alpha-emitters and Ac-227 are not present	3x10 ⁻¹¹		1x10 ⁻¹²	
If it is known that Ac-227, Th-230, Pa-231, Pu-238, Pu-239, Pu-240, Pu-242, Pu-244, Cm-248, Cf-249 and Cf-251 are not present	3x10 ⁻¹²		1x10 ⁻¹³	

- 4. If the mixture of radionuclides consists of uranium and its daughter products in ore dust prior to chemical processing of the uranium ore, the values specified below may be used in lieu of those determined in accordance with paragraph 1 above or those specified in paragraphs 2 and 3 above.
 - a. For purposes of Table I, Column 1, $1x10^{-10}$ μ Ci/ml gross alpha activity; or $5x10^{-11}$ μ Ci/ml natural uranium; or 75 micrograms per cubic meter of air natural uranium.
 - b. For purposes of Table II, Column 1, 3x10⁻¹² μCi/ml gross alpha activity; 2x10⁻¹² μCi/ml natural uranium; or 3 micrograms per cubic meter of air natural uranium.

5. For purposes of this note, a radionuclide may be considered as not present in a mixture if (a) the ratio of the concentration of that radionuclide in the mixture (C_a) to the concentration limit for that radionuclide specified in Table II of Appendix "A" (MPC_a) does not exceed 1/10, (i.e., $C_a/MPC_a \leq 1/10$ and (b) the sum of such ratios for all radionuclides considered as not present in the mixture does not exceed 1/4 (i.e., $C_a/MPC_a + C_b/MPC_b + \ldots \leq 1/4$).

[Statutory Authority: RCW 43.70 040. 91–02–049 (Order 121), recodified as 246–221–290, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–24–220, filed 12/8/80; Order 1095, § 402–24–220, filed 2/6/76; Order 1, § 402–24–220, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-221-300 Appendix B-Quantities exempt from labeling.

Material	Microcuries
Americium-241	0.01
Antimony-122	100
Antimony-124	10
Antimony-125	10
Arsenic-73	100
Arsenic-74	10
Arsenic-76	10
Arsenic-77	100
Barium-133	10
Barium-140	10
Bismuth-210	1
Bromine-82	10
Cadmium-109	10
Cadmium-115m	10
Cadmium-115	100
Calcium-45	10
Calcium-47	10
Carbon-14	100
Cerium-141	100
Cerium-143	100
Cerium-144	1
Cesium-131	1,000
Cesium-134m	100
Cesium-134	1
Cesium-135	10
Cesium-136	10
Cesium-137	10
Chlorine-36	10
Chlorine-38	10
Chromium-51	1,000
Cobalt-58m	10
Cobalt-58	10
Cobalt–60	. 1
Copper-64	100
Dysprosium-165	10
Dysprosium-166	100
Erbium-169	100
Erbium-171	100
Europium-152 (9.2 h)	100
Europium-152 (13 yr)	1
Europium-154	1
Europium-155	10
Fluorine-18	1,000
Gadolinium-153	10

Material	Microcuries	Material	Microcuries
Gadolinium-159	100	Praseodymium-143	100
Gallium-72	10	Promethium-147	10
Germanium-71	100	Promethium-149	10
Gold-198	100	Radium-226	0.01
Gold-199	100	Rhenium-186	100
Hafnium–181	10	Rhenium-188	100
Holmium-166	100	Rhodium-103m	100
Hydrogen-3	1,000	Rhodium-105	100
Indium-113m	100	Rubidium-86	10
Indium–114m	10	Rubidium-87	10
Indium–115m	100	Ruthenium-97	100
Indium-115	10	Ruthenium-103	10
Iodine-125	. 1	Ruthenium-105	10
Iodine–126	1	Ruthenium-106	1
Iodine-129	0.1	Samarium-151	10
Iodine-131	1	Samarium-153	100
Iodine-132	10	Scandium-46	10
Iodine-133	1	Scandium-47	100
Iodine-134	10	Scandium-48	10
Iodine-135	10	Selenium-75	10
Iridium–192	10	Silicon-31	100
Iridium-194	100	Silver-105	10
Iron-55	100	Silver–110m	1
Iron-59	10	Silver-111	100
Krypton-85	100	Sodium-22	10
Krypton-87	10	Sodium-24	10
Lanthanum-140	10	Strontium-85	10
Lutetium-177	100	Strontium-89	1
Manganese-52	10	Strontium-90	0.1
Manganese-54	10	Strontium-91	10
Manganese-56	10	Strontium-92	10
Mercury-197m	100	Sulphur-35	100
Mercury-197	100	Tantalum–182	10
Mercury-203	10	Technetium-96	10
Molybdenum-99	100	Technetium-97m	100
Neodymium-147	100	Technetium-97	100
Neodymium-149	100	Technetium-99m	100
Nickel-59	100	Technetium-99	10
Nickel-63	10	Tellurium-125m	10
Nickel-65	100	Tellurium-127m	10
Niobium-93m	10	Tellurium-127	100
Niobium–95	10	Tellurium-129m	10
Niobium-97	10	Tellurium-129	100
Osmium-185	10	Tellurium-131m	10
Osmium-191m	100	Tellurium-132	10
Osmium-191	100	Terbium-160	10
Osmium-193	100	Thallium-200	100
Palladium-103	100	Thallium-201	100
Palladium-109	100	Thallium-202	100
Phosphorus-32	10	Thallium-204	10
Platinum-191	100	Thorium (natural)	100
Platinum-193m	100	Thulium-170	10
Platinum-193	100	Thulium-171	10
Platinum-197m	100	Tin-113	10
Platinum-197	100	Tin-125	10
Plutonium-239	0.01	Tungsten-181	10
Polonium-210	0.1	Tungsten-185	10
Potassium-42	10	Tungsten-187	100
Praseodymium-142	100	Uranium (natural) ²	100
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Material	Microcuries
Uranium-233	0.01
Uranium-234 -	
Uranium-235	0.01
Vanadium-48	10
Xenon-131m	1,000
Xenon-133	100
Xenon-135	100
Ytterbium-169	10
Ytterbium-175	100
Yttrium–90	10
Yttrium-91	10
Yttrium-92	100
Yttrium-93	100
Zinc-65	10
Zinc-69m	100
Zinc-69	1,000
Zirconium-93	. 10
Zirconium-95	10
Zirconium-97	10

Notes: ¹Based on alpha disintegration rate of Th-232, Th-230 and their daughter products.

 2 Based on alpha disintegration rate of U-238, U-234, and U-235.

Material	Microcuries

Any alpha emitting radionuclide not listed above or mixtures of alpha emitters of unknown composition Any radionuclide other than alpha emitting radionuclides, not listed above or mixtures of beta emitters of unknown composition

0.01

0.1

Note: For purposes of WAC 402-24-090 and 402-24-140, where there is involved a combination of isotopes in known amounts, the limit for the combination should be derived as follows: Determine, for each isotope in the combination, the ratio between the quantity present in the combination and the limit otherwise established for the specific isotope when not in combination. The sum of such ratios for all the isotopes in the combination may not exceed "1" (i.e., "unity"). Example: For purposes of WAC 402-24-090 (1)(g), if a particular batch, room, or area contains 200 μ Ci of Au-198 and 500 μ Ci of C-14, it may also contain not more than 3 μ Ci of I-131 and remain unposted. This limit was determined as follows:

200 μ Ci Au-198/1,000 μ Ci + 500 μ Ci C-14/1,000 μ Ci + 3 μ Ci I-131/10 μ Ci =1

The denominator in each of the above ratios was obtained by multiplying the figure in the table by 10 as provided in WAC 402-24-090 (1)(g).

[Statutory Authority: RCW 43.70 040. 91–02–049 (Order 121), recodified as 246–221–300, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–24–230, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–24–230, filed 12/8/80; Order 1095, § 402–24–230, filed 2/6/76; Order 708, § 402–24–230, filed 8/24/72; Order 1, § 402–24–230, filed 7/2/71; Order 1, § 402–24–230, filed 1/8/69; Rules (part), filed 10/26/66.]

Chapter 246-222 WAC RADIATION PROTECTION—WORKER RIGHTS

WILC	
246-222-001	Purpose and scope.
246-222-020	Posting of notices to workers.
246-222-030	Instructions to workers.
246-222-040	Notifications and reports to individuals.
246-222-050	Presence of representatives of licensees or registrants
	and workers during inspection.
246-222-060	Consultation with workers during inspections.
246-222-070	Requests by workers for inspections.
246-222-080	Inspections not warranted—Informal review.

WAC 246-222-001 Purpose and scope. This chapter establishes requirements for notices, instructions and reports by licensees or registrants to individuals engaged in work under a license or registration and options available to such individuals in connection with department inspections of licensees or registrants to ascertain compliance with the provisions of the act and regulations, orders and licenses issued thereunder regarding radiological working conditions. The regulations in this chapter apply to all persons who receive, possess, use, own or transfer a source of radiation licensed by or registered with the department pursuant to the regulations in chapters 402-16, 402-19, and 402-22 WAC. The definitions contained in WAC 402-12-050 also apply to this chapter.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–222–001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–48–010, filed 12/11/86. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–48–010, filed 12/8/80; Order 1084, § 402–48–010, filed 1/14/76.]

WAC 246-222-020 Posting of notices to workers.

(1) Each licensee or registrant shall post current copies of the following documents:

- (a) The regulations in this chapter and in chapter 402-24 WAC;
- (b) The license, certificate of registration, conditions or documents incorporated into the license by reference and amendments thereto;
- (c) The operating procedures applicable to work under the license or registration;
- (d) Any notice of noncompliance involving radiological working conditions, proposed imposition of civil penalty, order issued pursuant to chapter 402–12 WAC, or any response from the licensee or registrant.
- (2) If posting of a document specified in subsection (1)(a), (b), or (c) of this section is not practicable, the licensee or registrant may post a notice which describes the document and states where it may be examined.
- (3) Each licensee or registrant shall conspicuously post pertinent emergency procedures when emergency procedures are required by the department.
- (4) Properly completed department Form RHF-3 "Notice to employees," shall be posted by each licensee or registrant wherever individuals work in or frequent any portion of a restricted area.
- (5) Documents, notices or forms posted pursuant to this section shall appear in a sufficient number of places to permit individuals engaged in work under the license

or registration to observe them on the way to or from any particular work location to which the document applies, shall be conspicuous, and shall be replaced if defaced or altered.

(6) Department documents posted pursuant to subsection (1)(d) of this section shall be posted as specified by subsection (5) of this section within five working days after receipt of the documents from the department; the licensee's or registrant's response, if any, shall be posted for a minimum of five working days after dispatch from the licensee or registrant. Such documents shall remain posted for a minimum of five working days or until action correcting the item(s) of noncompliance has been completed, whichever is later.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-222-020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-48-020, filed 12/11/86. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-48-020, filed 12/8/80; Order 1084, § 402-48-020, filed 1/14/76.]

WAC 246-222-030 Instructions to workers. (1) All individuals working in or frequenting any portion of a restricted area:

- (a) Shall be kept informed of the storage, transfer, or use of sources of radiation in such portions of the restricted area;
- (b) Shall be instructed in the health protection considerations associated with exposure to radiation or radioactive material, in precautions or procedures to minimize exposure, and in the purposes and functions of protective devices employed;
- (c) Shall be instructed in, and instructed to observe, to the extent within the worker's control, the applicable provisions of these regulations, department form RHF-3 "Notice to employees," and license conditions for the protection of personnel from exposures to radiation or radioactive material occurring in such areas;
- (d) Shall be instructed that any worker or representative of workers who believes that a violation of the regulations, license conditions, or unnecessary exposure to radiation exists or occurred, may request an inspection by the department by oral or written notification. The notification shall set forth specific grounds for the complaint. Any such notification to the department is confidential;
- (e) Shall be instructed of their right to notify the department if the individual suspects improper actions by a licensee/registrant, or conditions which may lead to a violation of these regulations, the license/registration, or unnecessary exposure to radiation or radioactive materials;
- (f) Shall be instructed that employment discrimination by a licensee/registrant against an employee because of actions described in this chapter is prohibited;
- (g) Shall be instructed as to their responsibility to report promptly to the licensee or registrant any condition which may lead to or cause a violation of the act, these regulations, and licenses or unnecessary exposure to radiation or radioactive material;
- (h) Shall be instructed in the appropriate response to warnings made in the event of any unusual occurrence

or malfunction that may involve exposure to radiation or radioactive material; and

- (i) Shall be advised as to the radiation exposure reports which workers shall be furnished pursuant to WAC 402-48-040.
- (2) By July 1, 1984, records of these instructions described in subsection (1) of this section, for all individuals working in, or frequenting any portion of a restricted area shall be maintained for inspection by the department until further notice. These records shall include a copy of WAC 402–48–030, or all the information contained in this section, along with a dated verification signature by the employee stating that the individual is satisfied with the explanation of the instructions contained in this section.
- (3) The extent of these instructions shall be commensurate with potential radiological health protection considerations in the restricted area.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–222–030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–48–030, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–48–030, filed 12/8/80; Order 1084, § 402–48–030, filed 1/14/76.]

WAC 246-222-040 Notifications and reports to individuals. (1) Radiation exposure data for an individual and the results of any measurements, analyses, and calculations of radioactive material deposited or retained in the body of an individual shall be reported to the individual as specified in this section. The information reported shall include data and results obtained pursuant to these regulations, orders, and license conditions, as shown in records maintained by the licensee or registrant pursuant to these regulations. Each notification and report shall:

- (a) Be in writing;
- (b) Include appropriate identifying data such as the name of the licensee or registrant, the name of the individual, and the individual's Social Security number;
 - (c) Include the individual's exposure information; and
 - (d) Contain the following statement:

"This report is furnished to you under the provisions of the Washington state department of social and health services, office of radiation protection, rules and regulations for radiation protection. You should preserve this report for further reference."

- (2) Upon request of the worker, each licensee or registrant shall advise each worker annually of the worker's current and accumulated exposure to radiation or radioactive material as shown in records maintained by the licensee or registrant pursuant to WAC 402-24-170 (1) and (3).
- (3) At the request of a worker formerly engaged in work controlled by the licensee or the registrant, each licensee or registrant shall furnish to each worker or former worker a report of the worker's exposure to radiation or radioactive material upon termination. For the purposes of this section, termination means the end of

employment with the licensee or the end of a work assignment in the licensee's restricted area(s) in a given calendar quarter without expectation, or specific scheduling, of reentry into such restricted area(s) during the remainder of that calendar quarter. Such report shall be furnished within thirty days from the time the request is made, or within thirty days after the exposure of the individual has been determined by the licensee or registrant, whichever is later; shall cover, within the period of time specified in the request, each calendar quarter in which the worker's activities involved exposure to radiation from radioactive material licensed by, or radiation machines registered with the department; and shall include the dates and locations of work under the license or registration in which the worker participated during this period.

- (4) When a licensee or registrant is required pursuant to WAC 402-24-200 to report to the department any exposure of an individual to radiation or radioactive material, the licensee or the registrant shall also provide the individual a written report on the individual's exposure data included therein. Such reports shall be transmitted at a time not later than the transmittal to the department.
- (5) In addition to the requirements of subsection (3) of this section, at the request of a worker who is terminating employment in a given calendar quarter with the licensee or registrant in work involving radiation exposure, or of a worker who, while employed by another person, is terminating assignment to work involving radiation exposure in the licensee's facility in that calendar quarter, each licensee or registrant shall provide to each such worker, or to the worker's designee, at termination, a written report regarding the radiation dose received by that worker from operations of the licensee or registrant during that specifically identified calendar quarter or fraction thereof, or provide a written statement of that dose if the finally determined personnel monitoring results are not available at that time. Estimated doses shall be clearly indicated as such.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–222–040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–48–040, filed 12/11/86; 83–19–050 (Order 2026), § 402–48–040, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–48–040, filed 12/8/80; Order 1084, § 402–48–040, filed 1/14/76.]

WAC 246-222-050 Presence of representatives of licensees or registrants and workers during inspection.

(1) Each licensee or registrant shall afford to the department at all reasonable times opportunity to inspect materials, machines, activities, facilities, premises, and records pursuant to these regulations.

- (2) During an inspection, department inspectors may consult privately with workers as specified in WAC 402–48–060. The licensee or registrant may accompany department inspectors during other phases of an inspection.
- (3) If, at the time of inspection, an individual has been authorized by the workers to represent them during department inspections, the licensee or registrant shall

notify the inspectors of such authorization and shall give the workers' representative an opportunity to accompany the inspectors during the inspection of physical working conditions.

- (4) Each workers' representative shall be routinely engaged in work under control of the licensee or registrant and shall have received instructions as specified in WAC 402-48-030.
- (5) Different representatives of licensees or registrants and workers may accompany the inspectors during different phases of an inspection if there is no resulting interference with the conduct of the inspection. However, only one workers' representative at a time may accompany the inspectors.
- (6) With the approval of the licensee or registrant and the workers' representative an individual who is not routinely engaged in work under control of the licensee or registrant, for example, a consultant to the licensee or registrant or to the workers' representative, shall be afforded the opportunity to accompany department inspectors during the inspection of physical working conditions.
- (7) Notwithstanding the other provisions of this section, department inspectors are authorized to refuse to permit accompaniment by any individual who deliberately interferes with a fair and orderly inspection. With regard to any area containing proprietary information, the workers' representative for that area shall be an individual previously authorized by the licensee or registrant to enter that area.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \$ 246–222–050, filed 12/27/90, effective 1/31/91; Order 1084, \$ 402–48–050, filed 1/14/76.]

- WAC 246-222-060 Consultation with workers during inspections. (1) Department inspectors may consult privately with workers concerning matters of occupational radiation protection and other matters related to applicable provisions of department regulations and licenses to the extent the inspectors deem necessary for the conduct of an effective and thorough inspection.
- (2) During the course of an inspection any worker may bring privately to the attention of the inspectors, either orally or in writing, any past or present condition which the worker has reason to believe may have contributed to or caused any violation of the act, these regulations, or license condition, or any unnecessary exposure of an individual to radiation from licensed radioactive material or a registered radiation machine under the licensee's or registrant's control. Any such notice in writing shall comply with the requirements of WAC 402-48-070(1).
- (3) The provisions of WAC 402-48-060(2) shall not be interpreted as authorization to disregard instructions pursuant to WAC 402-48-030.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-222-060, filed 12/27/90, effective 1/31/91; Order 1084, § 402-48-060, filed 1/14/76.]

WAC 246-222-070 Requests by workers for inspections. (1) Any worker or representative of workers who

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believes that a violation of the act, of these regulations, or of license conditions exists or has occurred in work under a license or registration with regard to radiological working conditions in which the worker is engaged, may request an inspection by giving notice of the alleged violation to the Washington state department of social and health services, office of radiation protection. Any such notice shall be in writing, shall set forth the specific grounds for the notice, and shall be signed by the worker or representative of the workers. A copy shall be provided to the licensee or registrant by the office of radiation protection no later than at the time of inspection except that, upon the request of the worker giving such notice, his name and the name of individuals referred to therein shall not appear in such copy or on any record published, released, or made available by the department, except for good cause shown.

- (2) If, upon receipt of such notice, the inspector for the office of radiation protection determines that the complaint meets the requirements set forth in subsection (1) of this section, and that there are reasonable grounds to believe that the alleged violation exists or has occurred, the inspector shall cause an inspection to be made as soon as practicable, to determine if such alleged violation exists or has occurred. Inspections pursuant to this section need not be limited to matters referred to in the complaint.
- (3) No licensee or registrant shall discharge or in any manner discriminate against any worker because such worker has filed any complaint or instituted or caused to be instituted any proceeding under these regulations or has testified or is about to testify in any such proceeding or because of the exercise by such worker on behalf of the worker or other workers of any option afforded by this chapter.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-222-070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-48-070, filed 12/11/86; Order 1084, § 402-48-070, filed 1/14/76.]

WAC 246-222-080 Inspections not warranted-Informal review. (1) If the department of social and health services, office of radiation protection determines, with respect to a complaint under WAC 402-48-070 that an inspection is not warranted because there are no reasonable grounds to believe that a violation exists or has occurred, the office of radiation protection shall notify the complainant in writing of such determination.

(a) If the complaint resulted from activities concerning naturally occurring, accelerator produced, radioactive materials and/or radiation producing machines: The complainant may obtain review of such determination by submitting a written statement of position to the Assistant Director, Division of Industrial Safety and Health, Mailstop HC-402, Olympia, Washington 98504. Such request for informal review will be processed according to the provisions of WAC 296-350-460 and the provisions of the interagency agreement between the department of labor and industries and the department of social and health services, office of radiation protection, if any.

- (b) If the complaint resulted from activities concerning byproduct material, source material, and/or special nuclear material: The complainant may obtain review of such determination by submitting a written statement of position with the Department of Social and Health Services, Health Services Division, Office of Radiation Protection, Mailstop LE-13, Olympia, Washington 98504 (206/753-3468), who will provide the licensee or registrant with a copy of such statement by certified mail, excluding, at the request of the complainant, the name of the complainant. The licensee or registrant may submit an opposing written statement of position with the department of social and health services, health services division, who will provide the complainant with a copy of such statement by certified mail. Upon the request of the complainant, the department of social and health services, health services division, may hold an informal conference in which the complainant and the licensee or registrant may orally present their views. An informal conference may also be held at the request of the licensee or registrant, but disclosure of the identity of the complainant will be made only following receipt of written authorization from the complainant. After considering all written or oral views presented, the department of social and health services, health services division, shall affirm, modify, or reverse the determination of the office of radiation protection and furnish the complainant and the licensee or registrant a written notification of the decision and the reason therefor.
- (2) If the office of radiation protection determines that an inspection is not warranted because the requirements of WAC 402-48-070(1) have not been met, it shall notify the complainant in writing of such determination. Such determination shall be without prejudice to the filing of a new complaint meeting the requirements of WAC 402-48-070(1).

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–222–080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–48–080, filed 12/11/86; Order 1084, § 402–48–080, filed 1/14/76.]

Chapter 246-224 WAC RADIATION PROTECTION—MACHINE ASSEMBLY AND REGISTRATION

246-224-001	Purpose and scope.
246-224-010	Exemptions.
246-224-020	Application for registration of radiation machine
	facilities.
246-224-030	Issuance of certificate of registration.
246-224-040	Expiration of certificate of registration.
246-224-050	Renewal of certificate of registration.
246-224-060	Separate locations.
246-224-070	Report of changes.
246-224-080	Approval not implied.
246-224-090	Repair person, assembler, or installer obligation.
246-224-100	Out-of-state radiation machines.

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WAC 246-224-001 Purpose and scope. (1) This chapter provides for the registration of radiation machine facilities.

- (2) For purposes of chapter 402–16 WAC of these regulations, "facility" means the location at which one or more radiation machines are installed and/or located within one building, vehicle, or under one roof and are under the same administrative control.
- (3) In addition to the requirements of this chapter, all registrants are subject to the applicable provisions of other parts of these regulations.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-224-001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-16-210, filed 12/8/80; Order 1084, § 402-16-210, filed 1/14/76. Formerly WAC 402-16-010.]

- WAC 246-224-010 Exemptions. (1) Electronic equipment that produces radiation incidental to its operation for other purposes is exempt from the registration and notification requirements of this part, providing the dose equivalent rate averaged over an area of 10 square centimeters does not exceed 0.5 mrem per hour at 5 cm from any accessible surface of such equipment.
- (2) Radiation machines while in transit or storage incident thereto are exempt from the requirements of this part.
- (3) Domestic television receivers are exempt from the requirements of this chapter.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–224–010, filed 12/27/90, effective 1/31/91; Order 1084, § 402–16–220, filed 1/14/76. Formerly WAC 402–16–100.]

WAC 246-224-020 Application for registration of radiation machine facilities. Each person having a radiation machine facility shall apply for registration of such facility with the department within fifteen calendar days after the initial operations of a radiation machine facility. Application for registration shall be completed on forms furnished by the department or on similar forms and containing all the information required by the department form and accompanying instructions.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–224–020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–16–230, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–16–230, filed 12/8/80; Order 1084, § 402–16–230, filed 1/14/76. Formerly WAC 402–16–020 and 402–16–040.]

WAC 246-224-030 Issuance of certificate of registration. Upon a determination that an application meets WAC 402-16-230 of the registration regulations, and requirements of WAC 440-44-050, "Radiation machine facility registration fees," the department shall issue a notice of registration.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–224–030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–16–232, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–16–232, filed 12/8/80.]

WAC 246-224-040 Expiration of certificate of registration. Except as provided by WAC 402-16-238(2) each certificate of registration shall expire at the end of the day on the date stated therein.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–224–040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–16–234, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–16–234, filed 12/8/80.]

WAC 246-224-050 Renewal of certificate of registration. (1) Application for renewal of registration shall be filed in accordance with WAC 402-16-230 at least thirty days prior to the expiration date.

(2) In any case in which a registrant not less than thirty days prior to the expiration of his existing certificate of registration has filed an application in proper form for renewal, such existing certificate of registration shall not expire until the application status has been determined by the department.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–224–050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–16–238, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–16–238, filed 12/8/80.]

WAC 246-224-060 Separate locations. A single registration form may be used to include several facilities provided such facilities are under the ownership or administrative control of the registrant and are within one single complex. Where, as a routine part of the normal conduct of business, registrable items are moved between or among such locations, the registrant will so indicate at the time of registration. Each registrant shall name one or more designated persons, preferably one for each location where the registrant is not normally present, who may be contacted by the department with respect to the requirements for registration.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–224–060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–16–240, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–16–240, filed 12/8/80; Order 1084, § 402–16–240, filed 1/14/76. Formerly WAC 402–16–050.]

WAC 246-224-070 Report of changes. The registrant shall notify the department in writing when making any change which would render the information contained in the application for registration and/or certificate of registration no longer accurate. Notifications shall be sent to Radiation Control Section, MS B 17-9, 1409 Smith Tower, Seattle, WA 98104.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–224–070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–16–250, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–16–250, filed 12/8/80; Order 1084, § 402–16–250, filed 1/14/76. Formerly WAC 402–16–060.]

WAC 246-224-080 Approval not implied. No person shall refer, in any advertisement, to the fact that a facility is registered with the department pursuant to the provisions of WAC 402-16-230 and so as to imply that any activity under such registration has been approved by the department.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-224-080, filed 12/27/90, effective 1/31/91; Order 1084, § 402-16-260, filed 1/14/76. Formerly WAC 402-16-070.]

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- WAC 246-224-090 Repair person, assembler, or installer obligation. (1) Any person who sells, leases, transfers, lends, disposes, assembles, or installs radiation machines in this state shall notify the department within fifteen calendar days of:
- (a) The name and address of persons who have received these machines;
- (b) The manufacturer, model, and serial number of the master control of each radiation machine transferred; and
 - (c) The date of transfer of each radiation machine.
- (2) No person shall make or install radiation machines, accessories used in connection with such machines or any components of such machines unless:
- (a) Such machines, accessories, or components meet the requirements of these regulations.
- (b) The registrant or transferee using such machines, accessories, or components has met the requirements of WAC 402-28-032, when applicable, prior to the date of transfer.
- (c) Shielding and/or construction requirements, as determined pursuant to WAC 402-28-032 when applicable, have been completed prior to the date of transfer of such machines, accessories, or components.
- (3) When requested by the registrant to make repair on an x-ray system that has malfunctioned in such a manner to have caused, or possibly caused an unintentional radiation exposure to patients, operator or member of the public, the assembler, transferor or installer, is required to notify the department of such work within twenty-four hours, or before repair is effected, whichever comes first. See WAC 402-28-020 for definition of accidental radiation exposure and electronic product defect.
- (4) Certified x-ray systems (21 CFR 1000) shall be assembled in such a manner that manufacturer's specifications and intended performance designs are met.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–224–090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–16–270, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–16–270, filed 12/8/80; Order 1084, § 402–16–270, filed 1/14/76. Formerly WAC 402–16–090.]

WAC 246-224-100 Out-of-state radiation machines. (1) Whenever any radiation machine is to be brought into the state, for any temporary use, the person proposing to bring such machine into the state shall give written notice to the department at least three working days before such machine is to be used in the state. The notice shall include the type of radiation machine; the nature, duration, and scope of use; and the exact location(s) where the radiation machine is to be used. If for a specific case the three working-day period would impose an undue hardship, the person may, upon application to the department, obtain permission to proceed sooner.

- (2) In addition the out-of-state person shall:
- (a) Comply with all applicable regulations of the department.
- (b) Supply the department such other information as the department may reasonably request.

(c) Not operate within the state on a temporary basis in excess of one hundred eighty calendar days per year. If operation in excess of one hundred eighty calendar days is desired, standard registration procedures are required (see WAC 402-16-230).

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–224–100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–16–280, filed 12/8/80; Order 1084, § 402–16–280, filed 1/14/76. Formerly WAC 402–16–110.]

Chapter 246-225 WAC RADIATION PROTECTION--X-RAYS IN THE HEALING ARTS

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WAC 246-225-001 Purpose and scope. This chapter establishes requirements, for which a registrant is responsible, for use of x-ray equipment by or under the supervision of an individual authorized by and licensed in accordance with state statutes to engage in the healing arts. The provisions of this chapter are in addition to, and not in substitution for, other applicable provisions of these regulations.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-225-001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-28-010, filed 12/8/80; Order 1084, § 402-28-010, filed 1/14/76; Order 1, § 402-28-101 (codified as WAC 402-28-010), filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-225-010 Definitions. As used in this chapter, the following definitions apply:

(1) "Accessible surface" means the external surface of the enclosure or housing provided by the manufacturer. 246-225-010

- (2) "Accidental radiation exposure incident" means an exposure to a patient, an operator, or a member of the public that was unintentional.
- (3) "Added filter" means the filter added to the inherent filtration.
- (4) "Aluminum equivalent" means the thickness of aluminum (type 1100 alloy) affording the same attenuation, under specified conditions, as the material in question. (The nominal chemical composition of type 1100 aluminum alloy is 99.00 percent minimum aluminum, 0.12 percent copper.)
- (5) "Assembler" means any person engaged in the business of assembling, replacing, or installing one or more components into an x-ray system or subsystem. An assembler may be the practitioner, his/her employee, an outside contractor, or an employee of an outside firm.
- (6) "Attenuation block" means a block or stack, having dimensions 20 cm by 20 cm by 3.8 cm, of type 1100 aluminum alloy or other aluminum alloys having equivalent attenuation.
- (7) "Automatic <u>exposure</u> control" means a device which automatically controls one or more technique factors in order to obtain at a preselected location(s) a required quantity of radiation (see also "phototimer").
 - (8) "Barrier" (see "protective barrier").
- (9) "Beam axis" means a line from the source through the centers of the x-ray fields.
- (10) "Beam-limiting device" means a device which provides a means to restrict the dimensions of the x-ray field
- (11) "Beam monitoring system" means a system designed to detect and measure the radiation present in the useful beam.
- (12) "Cephalometric device" means a device intended for the radiographic visualization and measurement of the dimensions of the human head.
- (13) "Certified components" means components of x-ray systems which have been certified by the manufacturer as meeting the requirements of the federal performance standard for x-ray equipment.
- (14) "Certified system" means any x-ray system which has one or more certified component(s).
- (15) "Changeable filters" means any filter, exclusive of inherent filtration, which can be removed from the useful beam through any electronic, mechanical or physical process.
- (16) "Coefficient of variation (C)" means the ratio of the standard deviation to the mean value of a population of observations. It is estimated using the following equation:

$$C = \frac{s}{\overline{X}} = \frac{1}{\overline{X}} \left[\sum_{i=1}^{n} \frac{(x_i)^{-\overline{X}})^2}{n-1} \right]^{1/2}$$

where

s = Estimated standard deviation of the population.

X = Mean value of observations in sample.

 $\overline{X}(i) = i^{th}$ observation sampled.

n = Number of observations in sample.

- (17) "Contact therapy system" means an x-ray system wherein the x-ray tube port is put in contact with or within 5 centimeters of, the surface being treated.
- (18) "Control panel" means that part of the x-ray control upon which are mounted the switches, knobs, pushbuttons, and other hardware necessary for manually setting the technique factors.
- (19) "Cooling curve" means the graphical relationship between heat units stored and cooling time.
 - (20) "Date of transfer." See installation date.
- (21) "Dead-man switch" means a switch so constructed that a circuit closing contact can be maintained only by continuous pressure on the switch by the operator.
- (22) "Department" means the department of social and health services which has been designated as the state radiation control agency.
 - (23) "Detector" (see "radiation detector").
- (24) "Diagnostic source assembly" means the tube housing assembly with a beam-limiting device attached.
- (25) "Diagnostic x-ray system" means an x-ray system designed for irradiation of any part of the human body for the purpose of recording or visualization for diagnostic purposes.
- (26) "Direct scattered radiation" means that scattered radiation which has been deviated in direction only by materials irradiated by the useful beam (see also "scattered radiation").
- (27) "Electronic product defect" means an error in design, manufacture, or performance of an x-ray system such that unintentional radiation exposure to a patient, an operator, or a member of the public has occurred.
- (28) "Entrance exposure rate" means the roentgens per unit time where the useful beam enters the patient.
 - (29) "Equipment" (see "x-ray equipment").
- (30) *" $\underline{Exposure}$ " means the quotient of dQ divided by dm where dQ is the absolute value of the total charge of the ions of one sign produced in air when all the electrons (negatrons and positrons) liberated by photons in a volume element of air having mass dm are completely stopped in air. (The special unit of $\underline{exposure}$ is the roentgen.)

Note: *When the word, exposure, is used in this part to mean one or more irradiations of a person for a healing arts purpose, or in a more general sense, it will not be underlined [italicized].

(31) "Field emission equipment" means equipment which uses an x-ray tube in which electron emission

from the cathode is due solely to the action of an electric field.

- (32) "Filter" means material placed in the useful beam to absorb preferentially selected radiations.
- (33) "Fluoroscopic imaging assembly" means a component which comprises a reception system in which x-ray photons produce a fluoroscopic image. It includes equipment housings, electrical interlocks if any, the primary protective barrier, and structural material providing linkage between the image receptor and the diagnostic source assembly.
- (34) "Full beam detector" means a radiation detector of such size that the total cross section of the maximum size useful beam is intercepted.
- (35) "General purpose radiographic x-ray system" means any radiographic x-ray system which, by design, is not limited to radiographic examination of specific anatomical regions.
- (36) "Gonad shield" means a protective barrier for the testes or ovaries.
- (37) "Half-value layer (HVL)" means the thickness of specified material which attenuates the beam of radiation to an extent such that the <u>exposure</u> rate is reduced to one-half of its original value. In this definition the contribution of all scattered radiation, other than any which might be present initially in the beam concerned, is deemed to be excluded.
- (38) "Healing arts screening" means the testing of an asymptomatic population using x-ray machines for the detection or evaluation of health indications when such tests are not specifically and individually ordered by a licensed practitioner of the healing arts legally authorized to prescribe such x-ray tests for the purpose of diagnosis or treatment.
- (39) "Heat unit" means a unit of energy equal to the product of the peak kilovoltage, miliamperes, and seconds, i.e., kVp x mA x second.
- (40) "Image intensifier" means a device consisting of an image intensifier tube installed in its housing which instantaneously converts an x-ray pattern into a light image of higher energy density.
- (41) "Image receptor" means any device, such as a fluorescent screen or radiographic film, which transforms incident x-ray photons either into a visible image or into another form which can be made into a visible image by further transformations.
- (42) "Image receptor support" means that part of a mammographic system designed to support the image receptor in a plane perpendicular to the x-ray beam during a mammographic examination.
- (43) "Inherent filtration" means the filtration of the useful beam provided by the permanently installed components of the tube housing assembly.
- (44) "Installation date" means the earliest date that a machine, accessory, or component is able to be used by a registrant or transferee but no later than the date of the first human exposure made using the machine, accessory, or component that has been installed.
- (45) "Interlock" means a device arranged or connected such that the occurrence of an event or condition

is required before a second event or condition can occur or continue to occur.

- (46) "Irradiation" means the exposure of matter to ionizing radiation.
- (47) "Kilovolts peak (kVp)" (see "peak tube potential").
 - (48) "kV" means kilovolts.
- (49) "kWs" means kilowatt second which is equal to the product of peak kilovolts, amperes, and seconds or 10^{-3} X kV. X mA. X sec.
- (50) "Lead equivalent" means the thickness of lead affording the same attenuation, under specified conditions, as the material in question.
- (51) "Leakage radiation" means radiation emanating from the diagnostic or therapeutic source assembly except for:
 - (a) The useful beam and
- (b) Radiation produced when the exposure switch or timer is not activated.
- (52) "Leakage technique factors" means the technique factors associated with the tube housing assembly which are used in measuring leakage radiation. They are defined as follows:
- (a) For capacitor energy storage equipment, the maximum rated peak tube potential and the maximum rated number of exposures in an hour for operation at the maximum rated peak tube potential with the quantity of charge per exposure being 10 milliampere seconds, or the minimum obtainable from the unit, whichever is larger.
- (b) For field emission equipment rated for pulsed operation, the maximum rated peak tube potential and the maximum rated number of x-ray pulses in an hour for operation at the maximum rated peak tube potential.
- (c) For all other equipment, the maximum rated peak tube potential and the maximum rated continuous tube current for the maximum rated peak tube potential.
- (53) "Light field" means that area of the intersection of the light beam from the beam-limiting device and one of the set of planes parallel to and including the plane of the image receptor, whose perimeter is the locus of points at which the illumination is one-fourth of the maximum in the intersection.
- (54) "Line-voltage regulation" means the difference between the no-load and the load line potentials expressed as a percent of the load line potential; that is,

Percent line-voltage = $100 (V_n-V_1)/V_1$ regulation

where:

 $V_{(n)}$ = No-load line potential $V_{(1)}$ = Load line potential

- (55) "mA" means tube current in milliamperes.
- (56) "mAs" means milliampere second or the product of the tube current in milliamperes and the time of exposure in seconds.
- (57) "Maximum line current" means the root mean squared current in the supply line of an x-ray machine operating at its maximum rating.
 - (58) "Mobile equipment" (see "x-ray equipment").

- (59) "Modified installation" means a room, building, office, or facility in which structural parameters which affect radiation safety are being changed; these parameters include such things as reconstruction or moving of walls, replacement of the x-ray machine with one of higher kVp or mA, a change in the direction of the beam, replacement of the control panel so that operator protection is adversely affected, a change in occupancy of adjacent areas, workload changes, etc.
- (60) "New installation" means a room, building, office, or facility newly built, or in which previously there has been no radiation machine.
- (61) "Peak tube potential" means the maximum value of the potential difference across the x-ray tube during an exposure.
- (62) "Phototimer" means a device which controls radiation exposure to the image receptor by detecting the total amount of radiation reaching the device. The radiation monitoring device(s) is part of an electronic circuit which controls the time the tube is activated (see also "automatic exposure control").
 - (63) "Portable equipment" (see "x-ray equipment").
- (64) "Position indicating device (PID)" means a device, on dental x-ray equipment which indicate the beam position and establishes a definite source-surface (skin) distance. The device may or may not incorporate or serve as a beam-limiting device.
- (65) "Primary protective barrier" (see "protective barrier").
- (66) "Protected area" means a shielded area in which attenuation of x-radiation is sufficient to meet the exposure limits of WAC 402-24-020 and the principles of WAC 402-10-010 and "ALARA" for individuals in that area.
- (67) "Protective apron" means an apron made of radiation absorbing materials, used to reduce radiation exposure.
- (68) "Protective barrier" means a barrier of radiation absorbing material(s) used to reduce radiation exposure.
- (a) "Primary protective barrier" means the material, excluding filters, placed in the useful beam, for protection purposes, to reduce the radiation exposure.
- (b) "Secondary protective barrier" means a barrier sufficient to attenuate the stray radiation to the required degree.
- (69) "Protective glove" means a glove made of radiation absorbing materials used to reduce radiation exposure.
- (70) "Radiation detector" means a device which in the presence of radiation provides by either direct or indirect means, a signal or other information suitable for use in measuring one or more quantities of incident radiation.
- (71) "Radiation therapy simulation system" means a fluoroscopic or radiographic x-ray system intended for localizing the volume to be exposed during radiation therapy and confirming the position and size of the therapeutic irradiation field.
- (72) "Radiograph" means an image receptor on which the image is created directly or indirectly by an x-ray pattern and results in a permanent record.

- (73) "Radiographic imaging system" means any system whereby a permanent or semi-permanent image is recorded on an image receptor by the action of ionizing radiation.
- (74) "Rating" means the operating limits of an x-ray system or subsystem as specified by the component manufacturer.
- (75) "Recording" means producing a permanent form of an image resulting from x-ray photons (e.g., film, video tape).
- (76) "Response time" means the time required for an instrument system to reach 90 percent of its final reading when the radiation-sensitive volume of the instrument system is exposed to a step change in radiation flux from zero sufficient to provide a steady state midscale reading.
- (77) "Scattered radiation" means radiation that, during passage through matter, has been deviated in direction (see also "direct scattered radiation").
- (78) "Secondary protective barrier" (see "protective barrier").
- (79) "Shutter" means a device attached to the tube housing assembly which can totally intercept the useful beam and which has a lead equivalency at least that of the tube housing assembly.
 - (80) "SID" (see "source-image receptor distance").
 - (81) "Source" means the focal spot of the x-ray tube.
- (82) "Source-image receptor distance (SID)" means the distance from the source to the center of the input surface of the image receptor.
- (83) "Special purpose x-ray equipment" means that which is designed for radiographic examination of one specific area of the body.
- (84) "Spot check" means an abbreviated calibration procedure which is performed to assure that a previous calibration continues to be valid.
- (85) "Spot film device" means a device intended to transport and/or position a radiographic image receptor between the x-ray source and fluoroscopic image receptor, including a device intended to hold a cassette over the input end of an image intensifier for the purpose of making a radiograph.
- (86) "Spot film" means a radiograph which is made during a fluoroscopic examination to record permanently conditions which exist during that fluoroscopic procedure.
- (87) "Stationary equipment" (see "x-ray equipment").
- (88) "Stray radiation" means the sum of leakage and scattered radiation.
- (89) "Technique factors" means the conditions of operation. They are specified as follows:
- (a) For capacitor energy storage equipment, peak tube potential in kV and quantity of charge in mAs.
- (b) For field emission equipment rated for pulsed operation, peak tube potential in kV and number of x-ray pulses.
- (c) For all other equipment, peak tube potential in kV and:
- (i) Either tube current in mA and exposure time in seconds,

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- (ii) Or the product of tube current and exposure time in mAs.
- (90) "Transmission detector" means a radiation detector through which the useful beam or part of the useful beam passes.
- (91) "Treatment volume" means the region, in the patient, to which a specified dose is to be delivered.
- (92) "Tube" means an x-ray tube, unless otherwise specified.
- (93) "Tube housing assembly" means the tube housing with tube installed. It includes high-voltage and/or filament transformers and other appropriate elements when they are contained within the tube housing.
- (94) "Tube rating chart" means the set of curves which specify the rated limits of operation of the tube in terms of the technique factors.
- (95) "Useful beam" means the radiation which passes through the tube housing port and the aperture of the beam-limiting device when the exposure switch or timer is activated.
- (96) "Variable-aperture beam-limiting device" means a beam-limiting device which has capacity for stepless adjustment of the x-ray field size.
- (97) "Visible area" means that portion of the input surface of the image receptor over which incident x-ray photons produce a visible image.
- (98) "Wedge filter" means an added filter with changing radio—opacities used to achieve more uniform optical densities on the image receptor when a body part of varying absorption characteristics is radiographed.
- (99) "X-ray control" means a device which controls input power to the x-ray high-voltage generator and/or the x-ray tube. It includes equipment which controls the technique factors of an x-ray exposure.
- (100) "X-ray equipment" means an x-ray system, subsystem, or component thereof. Types of x-ray equipment are as follows:
- (a) 'Mobile' means x-ray equipment mounted on a permanent base with wheels and/or casters for moving while completely assembled.
- (b) 'Portable' means x-ray equipment designed to be hand-carried.
- (c) 'Stationary' means x-ray equipment which is installed in a fixed location.
- (101) "X-ray field" means that area of the intersection of the useful beam and any one of the set of planes parallel to and including the plane of the image receptor, whose perimeter is the locus of points at which the exposure rate is one-fourth of the maximum in the intersection.
- (102) "X-ray high-voltage generator" means a device which transforms electrical energy from the potential supplied by the x-ray control to the tube operating potential. The device may also include means for transforming alternating current to direct current, filament transformers for the x-ray tube(s), high-voltage switches, electrical protective devices, and other appropriate elements.
- (103) "X-ray system" means an assemblage of components for the controlled production of x-rays. It includes minimally an x-ray high-voltage generator, an

- x-ray control, a tube housing assembly, a beam-limiting device, and the necessary supporting structures. Additional components which function with the system are considered integral parts of the system.
- (104) "X-ray subsystem" means any combination of two or more components of an x-ray system for which there are requirements specified in this part.
- (105) "X-ray tube" means any electron tube which is designed to be used primarily for the production of x-rays.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–225–010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–28–020, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–28–020, filed 12/8/80; Order 1084, § 402–28–020, filed 1/14/76; Order 1, § 402–28–020, filed 1/8/69; Rules (part), filed 10/26/66.]

- WAC 246-225-020 General requirements—Administrative controls. (1) No person shall make, sell, lease, transfer, lend or install x—ray equipment or the accessories used in connection with such equipment unless such accessories and equipment, when properly placed in operation and properly used, will meet the requirements of these regulations.
- (2) The registrant shall be responsible for directing the operation of the x-ray machines which are in his/her control. The registrant or registrant's agent shall assure that the following provisions are met in the operation of the x-ray machine(s):
- (a) An x-ray machine which does not meet the provisions of these regulations, or which is malfunctioning in a manner that threatens the health or safety of patient, operator, or general public shall not be operated for diagnostic or therapeutic purposes.
- (b) Individuals who will be operating the x-ray equipment shall be adequately instructed in safe operating procedures and shall be able to demonstrate competence, upon request from the department, in the correct use of the equipment. Required areas of competency are listed in Appendix II.
- (c) In the vicinity of each x-ray system's control panel a chart shall be provided, which specifies for most examinations which are performed by that system a listing of information, including but not limited to the following, for each projection within that examination:
- (i) Patient's anatomical size versus technique factors to be utilized;
 - (ii) Source to image receptor distance to be used;
- (iii) Type and placement of gonad shielding to be used; and
- (iv) If applicable, settings for automatic exposure devices.
- (d) When required by the department, a registrant shall create and provide to operators of the x-ray system, radiation safety procedures which address patient and occupationally-exposed personnel safety. These procedures shall instruct, or define any restrictions of the operating technique required for safe operation of the particular x-ray system.
- (e) Except for patients who cannot be moved out of the room and the patient being examined, only the staff

and ancillary personnel required for the medical procedure or training shall be present in the room during the radiographic exposure. Other than the patient being examined:

- (i) All individuals shall be positioned such that no part of the body including the extremities not protected by 0.5 mm lead equivalent will be struck by the useful beam.
- (ii) Staff and ancillary personnel shall be protected from the direct scatter radiation by protective aprons or whole body protective barriers of not less than 0.25 mm lead equivalent.
- (iii) Patients who cannot be removed from the room shall be protected from the direct scatter radiation by whole body protective barriers of 0.25 mm lead equivalent or shall be so positioned that the nearest portion of the body is at least 2 meters from both the tube head and the nearest edge of the image receptor.
- (iv) When a portion of the body of any staff or ancillary personnel is potentially subjected to stray radiation which could result in that individual receiving one quarter of the maximum permissible dose as defined in WAC 402-24-020 of these regulations, additional protective devices may be required by the department.
- (f) Gonad shielding of not less than 0.5 mm lead equivalent shall be used for patients who are of reproductive age during radiographic procedures in which the gonads are in the direct (useful) beam, except for cases in which this would interfere with the diagnostic procedure.
- (g) Persons shall not be exposed to the useful beam except for healing arts purposes, each exposure of which has been authorized by a licensed practitioner of the healing arts. This provision specifically prohibits deliberate exposure for the following purposes:
- (i) Exposure of an individual for training, demonstration or other purposes unless there are also healing arts requirements and proper prescription has been provided.
- (ii) Exposure of an individual for the purpose of healing arts screening without prior written approval of the state health officer.
- (h) When a patient or film must be provided with auxiliary support during a radiation exposure:
- (i) Mechanical holding devices shall be used when the technique permits. The safety rules, when required under (d) of this subsection, shall list individual projections where holding devices cannot be utilized;
- (ii) Written safety procedures, as required by (d) of this subsection, shall indicate the requirements for selecting a holder and the procedure the holder shall follow:
- (iii) The human holder shall be protected as required by (e)(i) of this subsection; the holder who is occupationally exposed to radiation shall be provided with a personnel monitoring device, worn at the collar outside the lead apron and records of exposures shall be maintained;
- (iv) No person shall be used routinely to hold film or patients;

- (v) In those cases where the patient must hold the film any portion of the body other than the area of clinical interest struck by the useful beam shall be protected by not less than 0.5 mm lead equivalent material;
- (vi) Such holding shall be permitted only in very unusual and rare situations;
- (vii) For the holder who is occupationally exposed to radiation, a record shall be made of the examination and shall include patient identification, the name of the human holder, date of the examination, number of exposures and technique factors utilized for the exposure(s) whenever the primary beam has knowingly intersected any portion of the holder's body.
- (i) Personnel dosimetry. All persons who are associated with the operation of an x-ray system are subject to the occupational exposure limits and the requirements for the determination of the doses which are stated in WAC 402-24-024. In addition: When protective clothing or devices are worn on portions of the body and a dosimeter is required, at least one such dosimeter shall be utilized as follows:
- (i) When an apron is worn, the monitoring device shall be worn at the collar outside of the apron.
- (ii) The dose to the whole body based on the maximum dose attributed to the most critical organ shall be recorded on the reports required by WAC 402-24-170 of these regulations. If more than one device is used or a record is made of the data, each dose shall be identified with the area where the device was worn on the body.
- (j) Personnel monitoring of an operator is required where exposure switch cords are utilized that allow the operator to stand in an unprotected area during exposures, and worst-case measurements by the department show that twenty-five percent of the exposure limits specified in WAC 402-24-020 may be exceeded.
- (k) All persons involved in the operation of a fluoroscope and working within the fluoroscopy room during its operation must wear a personnel dosimeter in accordance with WAC 402-24-070 and (i)(i) of this subsection. If extremities are in or near the primary beam, extremity dosimeters are also required.
- (l) Healing arts screening utilizing radiation. Any person proposing to conduct a healing arts screening program shall not initiate such a program without prior approval of the state health officer. When requesting such approval, that person shall submit the information outlined in Appendix III of this part. If any information submitted becomes invalid or outdated, the state health officer shall be notified immediately.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–225–020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–28–031, filed 12/11/86; 83–19–050 (Order 2026), § 402–28–031, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–28–031, filed 12/8/80; Order 1084, § 402–28–031, filed 1/14/76. Formerly WAC 402–28–030 (part).]

WAC 246-225-030 General requirements—Plan review. (1) Prior to construction, the floor plans and equipment arrangement of all installations (new or modifications of existing installations) utilizing x-rays for diagnostic or therapeutic purposes shall be submitted to

a qualified expert for determination of shielding requirements and submitted to the department for subsequent review. Review shall not imply approval.

- (2) The review of such plans shall not preclude the requirement of additional modifications should a subsequent analysis of operating conditions indicate the possibility of an individual receiving a dose in excess of the limits prescribed in WAC 402-24-020, 402-24-035, and 402-24-040.
- (3) Diagnostic veterinary, podiatric, and dental intraoral and panoramic facilities may be exempted from submitting shielding calculations if a floor plan showing those items indicated in subsection (4) of this section is submitted to the department. The department may require additional information if necessary.
- (4) In order for the department to provide an evaluation, technical advice, and official review of the shielding requirements for a radiation installation, a floor plan drawn to scale and the following data is required:
 - (a) The normal location of the x-ray tube;
 - (b) The limits of the tube travel;
 - (c) The directions in which the tube will be pointed;
 - (d) The location of any windows;
- (e) The location of the control booth or operator's position;
 - (f) The location of the exposure switch;
 - (g) The position of the viewing window, if any;
 - (h) The composition and thickness of the walls;
 - (i) If more than one story, the height floor-to-floor;
- (j) If more than one story, the composition and thickness of materials in the ceiling or floor;
 - (k) The make and model of the x-ray machine;
 - (1) The maximum kVp and mA;
- (m) The types of examination or treatments (e.g., chest, cephalometric, general x-ray, or therapy);
- (n) The identification and occupancy of areas adjacent to the x-ray room;
- (o) The anticipated x-ray workload, which may be expressed in number of patients and exposures per week including technique factors to be used, or milliampereseconds or milliampere-minutes per week, and estimates of the percentage of exposures that are expected to occur for a particular beam direction (e.g., twenty percent of exposures will be chest radiographs).
- (5) Minimum design requirements for x-ray machine operators' booths—new installations only. (These requirements do not apply to dental intraoral, podiatry and veterinary installations, but see subsections (6) and (7) of this section for dental panoramic and cephalometric.)
- (a) The operator shall be allotted not less than 7.5 square feet of unobstructed floor space in the booths.
- (i) The minimum space as indicated above must be a geometric configuration where no dimension is less than two feet.
- (ii) The space shall be allotted excluding any encumbrance by the console, such as an overhang, cables, or other similar encroachment.
- (iii) An extension of a straight line drawn between any point on the edge of the booth shielding and a point one foot horizontally beyond the nearest vertical edge of

- a chest cassette holder or any corner of the examination table shall not impinge on the unobstructed space.
- (iv) The booth walls shall be at least seven feet high and shall be permanently fixed to the floor or other structure as may be necessary.
- (v) When a door or moveable panel is used as the integral part of the booth structure, it must have a permissive device which will prevent an exposure when the door or panel is not closed.
- (b) Switch placement: The operator's switch for the radiographic machine shall be fixed within the booth and:
- (i) Shall be at least 102 centimeters (40 inches) inside the protected area;
- (ii) Shall allow the operator to use the available viewing windows.
 - (c) Viewing system requirements:
- (i) Each booth shall have at least one viewing device which will:
- (A) Be so placed that the operator can view the patient during any exposure; and
- (B) The device shall be so placed that the operator can have full view of any occupant of the room and any entry into the room.
- (ii) When the viewing system is a window the following requirements also apply:
- (A) It shall have a visible area of at least one square foot.
- (B) The glass shall have at least the same lead equivalence as that required in the booth's wall in which it is to be mounted.
- (iii) When the viewing system is by mirrors, the mirrors shall be so located as to accomplish the general requirements as in (i) of this subsection.
- (iv) When the viewing system is by electronic means (e.g., TV, etc.):
- (A) The camera shall be so located as to accomplish the general requirements in (i) of this subsection; and
- (B) There shall be an alternate viewing system as a backup for electronic failure.
- (6) Dimensions of primary beam shielding (chest, cephalometer, etc.) shall exceed the largest possible beam size by at least 30.5 centimeters (one foot) in every direction. Cephalometric primary beam shielding shall be deemed adequate if for a maximum workload of twenty films a week, two pound lead is installed (for occupiable areas).
- (7) A viewing device shall be installed in dental panoramic and cephalometric x-ray installations, so that the requirements of subsection (5)(c) of this section are met.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–225–030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–28–032, filed 12/11/86; 83–19–050 (Order 2026), § 402–28–032, filed 9/16/83; Order 1084, § 402–28–032, filed 1/14/76. Formerly WAC 402–28–030 (part).]

WAC 246-225-040 General requirements for all diagnostic x-ray systems. In addition to other requirements of this chapter, all diagnostic x-ray systems shall meet the following requirements:

- (1) Warning label. The control panel containing the main power switch shall bear the warning statement, legible and accessible to view: "WARNING: This x-ray unit may be dangerous to patient and operator unless safe exposure factors and operating instructions are observed."
- (2) Battery charge indicator. On battery-powered generators, visual means shall be provided on the control panel to indicate whether the battery is in a state of charge adequate for proper operation.
- (3) Leakage radiation from the diagnostic source assembly. The leakage radiation from the diagnostic source assembly measured at a distance of 1 meter in any direction from the source shall not exceed 100 milliroentgens in 1 hour when the x-ray tube is operated at its leakage technique factors.
- (4) Radiation from components other than the diagnostic source assembly. The radiation emitted by a component other than the diagnostic source assembly shall not exceed 2 milliroentgens in 1 hour at 5 centimeters from any accessible surface of the component when it is operated in an assembled x-ray system under any conditions for which it was designed. Compliance shall be determined by measurements averaged over an area of 100 square centimeters with no linear dimension greater than 20 centimeters.
 - (5) Beam quality
- (a) The half-value layer (HVL) of the useful beam for a given x-ray tube potential shall not be less than the values shown in this section, Table I. If it is necessary to determine such half-value layer at an x-ray tube potential which is not listed in Table I linear interpolation or extrapolation may be made.

WAC 402-28-035 TABLE I

Design operating range (kilovolts peak	potential (kilovolts	meters of	Half-value layer (milli- meter of aluminum equivalent for dental units)
Below 50 —	30	0.3	1.5
	40	0.4	1.5
	49	0.5	1.5
50 to 70 —	50	1.2	1.5
	60	1.3	1.5
	70	1.5	1.5
Above 70 —	71	2.1	2.1
	80	2.3	2.3
	90	2.5	2.5
	100	2.7	2.7
	110	3.0	3.0
	120	3.2	3.2
	130	3.5	3.5
	140	3.8	3.8
	150	4.1	4.1

(b) Beryllium window tubes have a minimum of 0.5 mm aluminum equivalent filtration permanently mounted in the useful beam.

- (c) For capacitor energy storage equipment, compliance shall be determined with the maximum quantity of charge per exposure.
- (d) The required minimal aluminum equivalent filtration shall include the filtration contributed by all materials which are always present between the focal spot of the tube and the patient. (e.g., a tabletop when the tube is mounted "under the table" and inherent filtration of the tube)
- (e) Filtration control. For x-ray systems which have variable kVp and variable filtration for the useful beam, a device shall link the kVp selector with the filter(s) and shall prevent an exposure unless the minimum amount of filtration required by (a) of this subsection is in the useful beam for the given kVp which has been selected.
- (6) Multiple tubes. Where two or more radiographic tubes are controlled by one exposure switch, the tube or tubes which have been selected shall be clearly indicated prior to initiation of the exposure. Such indication shall be both on the x-ray control panel and near or on the tube housing assembly which has been selected.
- (7) Mechanical support of tube head. The tube housing assembly supports shall be adjusted such that the tube housing assembly will remain stable during an exposure unless the tube housing movement during exposure is a designed function of the x-ray system.
 - (8) Technique indicators
- (a) The technique factors to be used during an exposure shall be indicated before the exposure begins, except when automatic exposure controls are used, in which case the technique factors which are set prior to the exposure shall be indicated.
- (b) On equipment having fixed technique factors, the requirement, in (a) of this subsection may be met by permanent markings. Indication of technique factors shall be visible from the operator's position except in the case of spot films made by the fluoroscopist.
- (9) Certified units. All diagnostic x-ray systems certified to comply with 21 CFR 1020 shall meet the requirements of that certification.
- (10) Linearity: The difference between the ratio of exposure to mAs at one mA setting and the ratio at another mA setting shall not exceed 0.10 times the sum of the ratios. This is written as:

$$X_1 - X_2 \le 0.10 (X_1 + X_2)$$

Where X_1 and X_2 are the ratios, mR/mAs for each mA station.

The test will be performed at any two adjacent mA stations with the same indicated focal spot size. For continuous mA selection, the test will be performed at two indicated mA stations differing by not more than a factor of two.

- (11) kVp accuracy: The difference between the indicated and actual kVp of an x-ray machine shall not be greater than 10% of the indicated kVp, or, alternatively, if available, the accuracy specifications of the control panel manufacturer must be met.
- (12) Requirements of subsections (10) and (11) of this section apply only to all certified machines and to

those uncertified machines where transfer, sale, or reassembly for use after January 1, 1984, is involved. See WAC 402-28-031(1).

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \$ 246–225–040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), \$ 402–28–035, filed 12/11/86; 83–19–050 (Order 2026), \$ 402–28–035, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), \$ 402–28–035, filed 12/8/80; Order 1084, \$ 402–28–035, filed 1/14/76. Formerly WAC 402–28–030 (part).]

WAC 246-225-050 Fluoroscopic x-ray systems. All fluoroscopic x-ray systems shall meet the following requirements:

- (1) Limitation of useful beam.
- (a) The fluoroscopic tube shall not produce x-rays unless the primary barrier is in position to intercept the entire useful beam at all times.
- (b) The entire cross section of the useful beam shall be intercepted by the primary protective barrier of the fluoroscopic image assembly at any SID.
- (c) Nonimage-intensified fluoroscopic equipment shall not be used.
- (d) For image-intensified fluoroscopic equipment without a spot film device, neither the length nor the width of the fluoroscopic x-ray field in the plane of the image receptor shall exceed that of the visible area of the image receptor by more than 3 percent of the SID. The sum of the excess length and the excess width shall be no greater than 4 percent of the SID. Measurements shall be made at the minimum SID available but at no less than 8 inches table top to image receptor distance.
- (e) For uncertified image—intensified fluoroscopic equipment with a spot film device, the fluoroscopic x—ray beam with the shutters wide open (during either fluoroscopy itself or spot films) shall be no larger than the dimensions of the largest spot film size for which the device is designed. Measurements shall be made at the minimum SID available but at no less than 8 inches table top to the film plane distance.
- (f) For certified (21 CFR 1020) image-intensified fluoroscopic equipment with a spot film device, neither the length nor the width of the fluoroscopic x-ray field in the plane of the image receptor shall exceed that of the visible area of the image receptor by more than 3 percent of the SID. The sum of the excess width shall be no greater than 4 percent of the SID. Measurements shall be made at the minimum SID available but at no less than 8 inches table top to film plane distance.
 - (g) For all image-intensified fluoroscopic equipment:
- (i) Means shall be provided to permit further limitation of the x-ray field;
- (ii) The minimum field size at the greatest SID shall be equal to or less than 5 centimeters by 5 centimeters;
- (iii) Compliance with (d) and (e) of this subsection shall be determined with the beam axis indicated to be perpendicular to the plane of the image receptor. For rectangular x-ray fields used with circular image reception, the error in alignment shall be determined along the length and width dimensions of the x-ray field which pass through the center of the visible area of the image receptor.

- (2) Activation of the fluoroscopic tube. X-ray production in the fluoroscopic mode shall be controlled by a deadman switch.
 - (3) Entrance exposure rate allowable limits.
- (a) For equipment with or without automatic brightness control, the <u>exposure</u> rate measured at the point where the center of the useful beam enters the patient should be as low as practicable and shall not exceed ten roentgens per minute, except during film recording of fluoroscopic images or when provided with optional high level control. When so provided, an audible signal shall indicate use of the high level control; special means of activating, via a deadman switch, shall be necessary for activation of high level control.
- (b) For equipment which is provided with optional high level control, the equipment shall not be operable at any combination of tube potential and current which will result in an <u>exposure</u> rate in excess of 5 roentgens per minute at the point where the center of the useful beam enters the patient, unless the high level control is activated.
- (i) Special means of activation of high level controls, such as additional pressure applied continuously by the operator, shall be required to avoid accidental use.
- (ii) A continuous signal audible to the fluoroscopist shall indicate that the high level control is being employed.
- (c) Measuring compliance of entrance exposure rate limits. Compliance with this subsection shall be determined as follows:
- (i) Movable grids and compression devices shall be removed from the useful beam during the measurement.
- (ii) If the source is below the table, <u>exposure</u> rate shall be measured 1 centimeter above the tabletop or cradle.
- (iii) If the source is above the table, the <u>exposure</u> rate shall be measured at 30 centimeters above the tabletop with the end of the beam-limiting device or spacer positioned as closely as possible to the point of measurement.
- (iv) In a C-arm type of fluoroscope, the <u>exposure</u> rate shall be measured 30 centimeters from the input surface of the fluoroscopic imaging assembly.
- (d) Periodic measurement of entrance <u>exposure</u> rate limits.
- (i) Periodic measurements of the <u>exposure</u> rate shall be made. An adequate period for such measurements shall be annually or after any maintenance of the system which might affect the exposure rate.
- (ii) Results of these measurements shall be available where any fluoroscopist may have ready access to them while using that fluoroscope. Results of the measurements shall include the maximum possible R/minute, as well as the physical factors used to determine all data, the name of the person performing the measurements, the last two dates the measurements were performed, and the type of device used in making the measurements.
 - (iii) Conditions of measurement.
- (A) The kVp shall be adjusted to that which will produce the maximum entrance exposure rate;

- (B) The high level control, if present, shall not be activated;
- (C) The x-ray system(s) that incorporates automatic exposure control (automatic brightness control, etc.) shall have sufficient material (e.g. lead or lead equivalence) placed in the useful beam to produce the maximum output of the x-ray system; and
- (D) X-ray system(s) that do not incorporate automatic <u>exposure</u> control shall utilize the maximum milliamperage of the x-ray system. Materials (e.g. an attenuation block) may be placed in the useful beam to protect the imaging system.
 - (4) Barrier transmitted radiation rate limits.
- (a) The <u>exposure</u> rate due to transmission through the primary protective barrier with the attenuation block in the useful beam, combined with radiation from the image intensifier, if provided, shall not exceed 2 milliroentgens per hour at 10 centimeters from any accessible surface of the fluoroscopic imaging assembly beyond the plane of the image receptor for each roentgen per minute of entrance exposure rate.
 - (b) Measuring compliance of barrier transmission.
- (i) The <u>exposure</u> rate due to transmission through the primary protective barrier combined with radiation from the image intensifier shall be determined by measurements averaged over an area of 100 square centimeters with no linear dimension greater than 20 centimeters.
- (ii) If the source is below the tabletop, the measurement shall be made with the input surface of the fluoroscopic imaging assembly positioned 30 centimeters above the tabletop.
- (iii) If the source is above the tabletop and the SID is variable, the measurement shall be made with the end of the beam-limiting device or spacer as close to the tabletop as it can be placed, provided that it shall not be closer than 30 centimeters.
- (iv) Movable grids and compression devices shall be removed from the useful beam during the measurement.
- (v) The attenuation block shall be positioned in the useful beam 10 centimeters from the point of measurement of entrance exposure rate and between this point and the input surface of the fluoroscopic imaging assembly.
- (5) Indication of potential and current. During fluoroscopy and cinefluorography, x-ray tube potential and current shall be continuously indicated.
- (6) Source-skin distance. The source to skin distance shall not be less than:
- (a) 38 centimeters on stationary fluoroscopes manufactured after the effective date of this regulation,
- (b) 35.5 centimeters on stationary fluoroscopes which are in operation prior to the effective date of these regulations,
 - (c) 30 centimeters on all mobile fluoroscopes, and
- (d) 20 centimeters for image intensified fluoroscopes used for specific surgical application. The users operating manual must provide precautionary measures to be adhered to during the use of device.
 - (7) Fluoroscopic timer.

- (a) Means shall be provided to preset the cumulative on—time of the fluoroscopic tube. The maximum cumulative time of the timing device shall not exceed 5 minutes without resetting.
- (b) A signal audible to the fluoroscopist shall indicate the completion of any preset cumulative on-time. Such signal shall continue to sound while x-rays are produced until the timing device is reset. Alternatively, the timing device may terminate exposures at the end of the preset time.
- (8) Mobile fluoroscopes. In addition to the other requirements of this section:
- (a) In the absence of a table top, a cone or spacer frame shall limit the target—to—skin distance to not less than twelve inches.
- (b) A machine shall not be operated when the collimating cone or diaphragm is not in place.
 - (9) Control of scattered radiation.
- (a) Fluoroscopic table designs when combined with normal operating procedures shall be such that no unprotected part of any staff or ancillary person's body shall be exposed to unattenuated scattered radiation which originates from under the table. The attenuation required shall be not less than 0.25 mm lead equivalent.
- (b) Equipment configuration when combined with procedures shall be such that no portion of any staff or ancillary person's body, except the extremities, shall be exposed to the unattenuated scattered radiation emanating from above the table top unless:
- (i) The radiation has passed through not less than 0.25 mm lead equivalent material (e.g., drapes, Bucky-slot cover-sliding or folding panel, or self supporting curtains) in addition to any lead equivalency provided by the protective apron referred to in WAC 402-28-031 (2)(e).
- (ii) Exceptions to (b) of this subsection may be made in some special procedures where a sterile field will not permit the use of the normal protective barriers. Where the use of prefitted sterilized covers for the barriers is practical, the department shall not permit such exception.
- (10) Radiation therapy simulation systems. Radiation therapy simulation systems shall be exempt from all the requirements of subsections (1), (4) and (7) of this section: Provided, That:
- (a) Such systems are designed and used in such a manner that no individual other than the patient is in the x-ray room during periods of time when the system is producing x-rays; and
- (b) Such systems as do not meet the requirements of subsection (7) of this section, and are provided with a means of indicating the cumulative time during which individual patient has been exposed to x-rays. Procedures shall require that the timer be reset between examinations in such cases.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–225–050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–28–040, filed 12/11/86; 83–19–050 (Order 2026), § 402–28–040, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–28–040, filed 12/8/80; Order 1084, § 402–28–040, filed

1/14/76; Order 1, § 402-28-040, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-225-060 Radiographic systems other than fluoroscopic, dental intraoral, or veterinarian systems—Beam limitation. The useful beam shall be limited to the area of clinical interest and show evidence of collimation. This shall be deemed to have been met if a positive beam limiting device has been properly used or if evidence of collimation is shown on at least three sides or three corners of the film, (for example, projections on the shutters of the collimator, cone cutting at the corners or a border at the film's edge).

- (1) General purpose stationary and mobile x-ray systems.
- (a) There shall be provided a means for stepless adjustment of the size of the x-ray field such that each dimension of the x-ray field is independently variable. The minimum field size at a SID of 100 centimeters shall be equal to or less than 5 by 5 centimeters.
- (b) Adequate means shall be provided for visually defining the perimeter of the x-ray field. The total misalignment of the edges of the visually defined field with the respective edges of the x-ray field along either the length or width of the visually defined field shall not exceed 2 percent of the distance from the source to the center of the visually defined field when the surface upon which it appears is perpendicular to the central axis of the x-ray beam.
- (2) In addition to the requirements of WAC 402-28-051(1) above all stationary x-ray systems shall meet the following requirements:
- (a) Means shall be provided to indicate when the axis of the x-ray beam is perpendicular to the plane of the image receptor and to align the center of the x-ray field with respect to the center of the image receptor to within 2 percent (5 percent for equipment manufactured prior to August 1974) of the SID. Dental lateral jaw examinations shall be excluded from this requirement;
- (b) The beam-limiting device shall numerically indicate the field size in the plane of the image receptor to which it is adjusted;
- (c) Indication of field size dimensions and SID's shall be specified in inches and/or centimeters;
- (d) Indication of field size dimensions shall be such that aperture adjustments result in x-ray field dimensions in the plane of the image receptor to within 2 percent of the SID when the beam axis is perpendicular to the plane of the image receptor.
- (3) Radiographic equipment designed for only one image receptor size at a fixed SID shall be provided with means to limit the field at the plane of the image receptor to dimensions no greater than those of the image receptor, and to align the center of the x-ray field with the center of the image receptor to within 2 percent of the SID.
 - (4) Special purpose x-ray systems.
- (a) These systems shall be provided with means to limit the x-ray field in the plane of the image receptor so that such field does not exceed each dimension of the image receptor by more than 2 percent of the SID when

the axis of the x-ray beam is perpendicular to the plane of the image receptor.

- (b) These systems shall be provided with means to align the center of the x-ray field with the center of the image receptor to within 2 percent (5 percent for equipment manufactured prior to August 1974) of the SID.
- (c) The above WAC 402-28-051 (4)(a) and 402-28-051 (4)(b) may be met with a system that meets the requirements for a general purpose x-ray system as specified in WAC 402-28-051(1) or, when alignment means are also provided, may be met with either:
- (i) An assortment of removable, fixed-aperture, beam-limiting devices sufficient to meet the requirement for each combination of image receptor size and SID for which the unit is designed (each such device shall have clear and permanent markings to indicate the image receptor size and SID for which it is designed); or
- (ii) A beam-limiting device having multiple fixed apertures sufficient to meet the requirement for each combination of image receptor size and SID for which the unit is designed. Permanent, clearly legible markings shall indicate the image receptor size and SID for which each aperture is designed and shall indicate which aperture is in position for use.
- (5) Systems designed for or provided with special attachments for mammography. Radiographic systems designed for mammography only and general purpose radiographic systems, when special attachments for mammography are in service, shall be provided with means to limit the useful beam such that the x-ray field at the plane of the image receptor does not extend beyond any edge of the image receptor at any designed SID except the edge of the image receptor designed to be adjacent to the chest wall where the x-ray field may not extend beyond such edge by more than 2 percent of the SID. The requirement can be met with a system which performs as prescribed in WAC 402-28-051 (4)(c). When the beam-limiting device and image receptor support device are designed to be used to immobilize the breast during a mammographic procedure and the SID may vary, the SID indication specified in WAC 402-28-051 (4)(c)(i) and (ii) shall be the maximum SID for which the beam-limiting device or aperture is designed. In addition, each image receptor support intended for installation on a system designed only for mammography shall have clear and permanent markings to indicate the maximum image receptor size for which it is designed.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–225–060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–28–051, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–28–051, filed 12/8/80; Order 1084, § 402–28–051, filed 1/14/76. Formerly WAC 402–28–050 (part).]

WAC 246-225-070 Radiographic systems other than fluoroscopic, dental intraoral, or veterinary systems—Radiation exposure control devices. (1) Timers. Means shall be provided to terminate the exposure at a preset time interval, preset product of current and time, a preset number of pulses, or a preset radiation exposure to the image receptor. In addition, it shall be impossible

to make an exposure when the timer is set to a zero or off position if either position is provided.

- (2) X-ray control (exposure switch):
- (a) A control which shall be the equivalent of a deadman switch, shall be incorporated into each x-ray system such that an exposure can be terminated at any time except for:
 - (i) Exposure of one-half second or less, or
- (ii) During serial radiography when means shall be provided to permit completion of any single exposure of the series in process.
- (b) Each x-ray control shall be located in such a way as to meet the following requirements:
- (i) Stationary x-ray systems shall be required to have the x-ray exposure switch permanently mounted in a protected area so that the operator has no choice but to remain in that protected area during the entire exposure;
 - (ii) Mobile and portable x-ray systems shall have:
- (A) An exposure cord which can extend for a minimum of 12 feet from the patient; or
- (B) A protective barrier of 0.25 millimeter lead equivalent between the patient and the operator.
- (c) Each x-ray control shall provide visual evidence to the operator that x-rays are being produced and an audible signal that the exposure has terminated.
- (3) Automatic <u>exposure</u> controls (phototimers). When an automatic exposure control is provided:
- (a) Indication shall be made on the control panel when this mode of operation is selected;
- (b) When the x-ray tube potential is equal to or greater than 50 kVp, the minimum exposure time for field emission equipment rated for pulsed operation shall be equal to or less than the interval equivalent to two pulses;
- (c) The minimum exposure time for all equipment other than that specified in WAC 402-28-052(3)(b) shall be equal to or less than 1/60 second or a time interval required to deliver 5 mAs, whichever is greater.
- (4) Reproducibility. When four timer tests are performed, at identical timer settings the average time period (T) shall be greater than or equal to five times the maximum period $T_{(max)}$ less the minimum period $T_{(min)}$. T shall be equal to or less than 0.5 seconds.

\overline{T} greater than or equal to 5 $[T_{(max)} - T_{(min)}]$

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–225–070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–28–052, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–28–052, filed 12/8/80; Order 1084, § 402–28–052, filed 1/14/76. Formerly WAC 402–28–050 (part).]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 246-225-080 Radiographic systems other than fluoroscopic, dental intraoral, or veterinary systems—Source-to-skin or receptor distance. (1) Limitation. All radiographic systems shall be provided with a durable, securely fastened means to limit the source-to-skin distance to not less than 23 centimeters. The requirement can be met when the collimator or cone provides the required limits.

(2) Source to receptor distance measuring device. All radiographic systems shall be provided with a device or reference, other than a collimator light localizer, which will indicate the selected source to image receptor distance (SID) to within 2 percent of the indicated SID.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-225-080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83-19-050 (Order 2026), § 402-28-053, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-28-053, filed 12/8/80; Order 1084, § 402-28-053, filed 1/14/76. Formerly WAC 402-28-050 (part).]

- WAC 246-225-090 Radiographic systems other than fluoroscopic and dental intraoral—Exposure reproducibility. The exposure produced shall be reproducible to within the following criteria: When all technique factors are held constant, the coefficient of variation shall not exceed 0.10.
- (1) For manual exposure control mode, this shall be deemed to have been met if when four <u>exposures</u> at identical technique factors are made, the value of the average <u>exposure</u> E (with bar over it) is greater than five times the maximum <u>exposure</u>, $E_{(max)}$, minus the minimum exposure, $E_{(min)}$.

$$\overline{E} > 5 [E_{(max)} - E_{(min)}]$$

- (2) For phototimed exposure control mode, this shall be deemed to have been met if when four exposures at identical technique factors are made, the value of the average exposure E (with bar over it) is greater than five times the maximum exposure, E (max), minus the minimum exposure, E (min). The four exposures are to be made under the following conditions in phototimed mode:
 - (a) The kV is held constant.
 - (b) The mA, if selectable, is held constant.
 - (c) The selected density, if selectable, is held constant.
- (d) Selection of phototimer radiation detectors (single or multiple detectors selected) is varied for each of the four exposures, if selectable.
- (e) The same attenuator is placed in the x-ray field between the selected phototimer radiation detectors (photocells) and the radiation detector used to determine the four exposure values.
- (f) The selected phototime radiation detectors (photocells) are within the x-ray field during each exposure measurement and are covered completely by the attenuator.
- (3) Systems employing deliberately mismatched phototimed cells are permitted providing written specifications for the mismatch are available for inspection.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–225–090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–28–054, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–28–054, filed 12/8/80; Order 1084, § 402–28–054, filed 1/14/76. Formerly WAC 402–28–050 (part).]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 246-225-100 Radiographic systems—Standby radiation from capacitor energy storage equipment. Radiation emitted from the x-ray tube when the exposure switch or timer is not activated shall not exceed a rate of 2 milliroentgens per hour at 5 centimeters from any accessible surface of the diagnostic source assembly, with the beam-limiting device fully open.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \$246-225-100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), \$402-28-055, filed 12/8/80; Order 1084, \$402-28-055, filed 1/14/76. Formerly WAC 402–28–050 (part).]

WAC 246-225-110 Intraoral dental radiographic systems. In addition to the provisions of WAC 402-28-031, 402-28-032, and 402-28-035 the requirements of this section apply to x-ray equipment and associated facilities used for dental radiography. Criteria for extraoral dental radiographic systems are covered in WAC 402-28-051, 402-28-052, and 402-28-053.

- (1) Source-to-skin distance (SSD). X-ray systems designed for use with an intraoral image receptor shall be provided with means to limit source-to-skin distance to not less than:
- (a) 18 centimeters if operable above 50 kilovolts peak, or
- (b) 10 centimeters if not operable above 50 kilovolts peak.
 - (2) Field limitation
- (a) Radiographic systems designed for use with an intraoral image receptor shall be provided with means to limit the x-ray beam such that:
- (i) If the minimum source—to—skin distance (SSD) is 18 centimeters or more, the x—ray field, at the minimum SSD, shall be containable in a circle having a diameter of no more than 7 centimeters; and
- (ii) If the minimum SSD is less than 18 centimeters, the x-ray field, at the minimum SSD, shall be containable in a circle having a diameter of no more than 6 centimeters.
- (b) An open ended position indicating device shall be used. The shielding shall be equivalent to that required for the diagnostic source assembly (WAC 402-28-035(3)).
- (3) Timers. Means shall be provided to terminate the exposure at a preset time interval, preset product of current and time, a preset number of pulses, or a preset radiation exposure to the image receptor. In addition,
- (a) Termination of exposure shall cause automatic resetting of the timer to its initial setting or to zero.
- (b) It shall not be possible to make an exposure when the timer is set to a zero or off position if either position is provided.
 - (4) X-ray control exposure switch:
- (a) A control, which shall be the equivalent of a dead-man switch, shall be incorporated into each x-ray system.
- (b) Each x-ray control shall be located in such a way as to meet the following criterion:
- (i) For stationary x-ray systems it shall be required that the control switch be permanently mounted in a protected area (e.g., corridor outside the room) so that

the operator has no choice but to remain in that protected area during the entire exposure. This requirement pertains only to new or modified installations assembled after May 1, 1980.

- (ii) Permanently mounted in a protected area shall be interpreted as meaning that the exposure switch is fixed in position no less than 36 inches from access to the direct scatter radiation field.
- (c) The x-ray control shall provide a visual indication of x-ray production observable at or from the operator's protected position or a signal audible to the operator shall indicate that the exposure has terminated, or both.
- (5) Exposure reproducibility. The exposure produced shall be reproducible to within the following criteria:

When all technique factors are held constant, the coefficient of variation shall not exceed 0.10. This shall be deemed to have been met if when four exposures at identical technique factors are made that the value of the average exposure (E (with bar over it)) is greater than or equal to five times the maximum exposure ($E_{(min)}$ minus the minimum exposure $E_{(min)}$.

 \overline{E} greater than or equal to 5 $[E_{(max)} - E_{(min)}]$

- (6) Operating controls.
- (a) Patient and film holding devices shall be used when the techniques permit.
- (b) Neither the tube housing nor the position indicating device shall be hand held during an exposure. The tube housing shall remain stable during exposure.
- (c) The x-ray system shall be arranged and operated in such a manner that the useful beam at the patient's skin does not exceed the dimensions specified in WAC 402-28-080 (2)(a).
- (d) Dental fluoroscopy without image intensification shall be prohibited.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–225–110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–28–080, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–28–080, filed 12/8/80; Order 1084, § 402–28–080, filed 1/14/76; Order 1, § 402–28–080, filed 1/8/69; Rules (part), filed 10/26/66.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 246-225-120 Therapeutic x-ray installations less than 1 MeV. (1) Equipment requirements.

- (a) Leakage radiation. When the tube is operated at its leakage technique factors, the leakage radiation shall not exceed the value specified at the distance specified for the classification of that x-ray system:
- (i) Contact therapy systems. Leakage radiation shall not exceed 100 milliroentgens per hour at five centimeters from the surface of the tube housing assembly;
- (ii) 0-150 kVp systems. Systems which are manufactured or installed prior to the effective date of this section shall have a leakage radiation which does not exceed one roentgen in one hour at one meter from the source;
- (iii) 0-150 kVp systems. Systems which are manufactured on or after the effective date of this section shall

have a leakage radiation which does not exceed 100 milliroentgens in one hour at one meter from the source;

- (iv) 151 to 999 kVp systems. The leakage radiation shall not exceed one roentgen in one hour at one meter from the source except systems that operate in excess of 500 kVp may have a leakage radiation at one meter from the source equivalent to the exposure within one hour of the useful beam at one meter from the source multiplied by a factor of 0.001.
- (b) Permanent beam limiting devices. Permanent fixed diaphragms or cones used for limiting the useful beam shall provide the same or higher degree of protection as that required by the tube housing assembly.
 - (c) Removable and adjustable beam limiting devices.
- (i) Removable beam limiting devices shall, for the portion of the useful beam to be blocked by these devices, transmit not more than one percent of the original x-ray beam at the maximum kilovoltage and maximum treatment filter;
- (ii) Adjustable beam limiting devices installed after the effective date of this section shall meet the requirements of (c)(i) of this subsection;
- (iii) Adjustable beam limiting devices installed before the effective date of this section shall, for the portion of the x-ray beam to be blocked by these devices, transmit not more than five percent of the original x-ray beam at the maximum kilovoltage and maximum treatment filter.
- (d) Filter system. The filter system shall be so designed that:
- (i) Filters cannot be accidently displaced from the useful beam at any possible tube orientation;
- (ii) Each filter is marked as to its material of construction and its thickness or wedge angle for wedge filters;
- (iii) It shall be possible for the operator to determine the presence or absence of each filter and the orientation of each wedge filter in the useful beam when the operator is at the control panel, either by display at the control panel or by direct observation; and
- (iv) The radiation at five centimeters from the filter insertion slot opening does not exceed 30 roentgens per hour under any operating conditions.
- (e) Tube immobilization. The tube housing assembly shall be capable of being immobilized during stationary treatments.
- (f) Focal spot marking. The tube housing assembly shall be so marked that it is possible to determine the location of the focal spot to within five millimeters, and such marking shall be readily accessible for use during calibration procedures.
 - (g) Timer.
- (i) A timer shall be provided which has a display at the treatment control panel. The timer shall be graduated in minutes and fractions of minutes. The timer shall have a preset time selector and an elapsed time indicator;
- (ii) The timer shall be a cumulative timer which activates with radiation and retains its reading after irradiation is interrupted or terminated. After irradiation is

- terminated and before irradiation can be reinitiated, it shall be necessary to cycle the preset time selector through zero time;
- (iii) The timer shall terminate irradiation when a preselected time has elapsed;
- (iv) The timer shall permit accurate presetting and determination of exposure times as short as 1 second;
- (v) The time shall not permit an exposure if set at zero;
- (vi) The timer shall not activate until the shutter is opened, when patient irradiation is controlled by a shutter mechanism.
- (h) Control panel functions. The control panel, in addition to the displays required in other provisions of this chapter shall have:
- (i) An indication of whether electrical power is available at the control panel and if activation of the x-ray tube is possible;
- (ii) An indication of whether x-rays are being produced;
 - (iii) Means for indicating kV and x-ray tube current;
- (iv) The means for terminating an exposure at any time;
- (v) A locking device which will prevent unauthorized use of the x-ray system; and
- (vi) For x-ray equipment manufactured after the effective date of this section, a positive display of specific filter(s) in the beam.
- (i) Multiple tubes. When a control panel may energize more than one x-ray tube:
- (i) It shall be possible to activate only one x-ray tube at any time;
- (ii) There shall be an indication at the control panel identifying which x-ray tube is energized; and
- (iii) There shall be an indication at the tube housing assembly when that tube is energized.
- (j) Source-to-patient distance. There shall be means of determining the source-to-patient distance to within one centimeter.
- (k) Shutters. Unless it is possible to bring the x-ray output to the prescribed exposure parameters within five seconds, the entire useful beam shall be automatically attenuated by a shutter having a lead equivalency not less than that of the tube housing assembly. In addition:
- (i) After the unit is at operating parameters, the shutter shall be controlled electrically by the operator from the control panel;
- (ii) An indication of shutter position shall appear at the control panel.
- (1) Low filtration x-ray tubes. Each x-ray system equipped with a beryllium or other low-filtration window shall be clearly labeled as such upon the tube housing assembly and at the control panel.
- (2) Facility design requirements for systems capable of operating above 50 kVp.

In addition to shielding adequate to meet requirements of chapters 402–22 and 402–24 WAC and the shielding plan review provisions of WAC 402–28–032, the treatment room shall meet the following design requirements:

- (a) Warning lights. Treatment rooms to which access is possible though more than one entrance shall be provided with warning lights, in a readily observable position near the outside of all access doors, which will indicate when the the useful beam is "on." Also, it is required that entrances other than the main one be equipped with interior locks, activated for the period of exposure, and that the main entrance be under control of the operator.
- (b) Voice communication. Provision shall be made for two-way aural communication between the patient and the operator at the control panel; however, where excessive noise levels make aural communication impractical, other methods of communication shall be used.
- (c) Viewing systems. Windows, mirrors, closed-circuit television, or an equivalent system shall be provided to permit continuous observation of the patient during irradiation and shall be so located that the operator can observe the patient from the control panel. When the primary viewing system is by electronic means (e.g., television), an alternate viewing system shall be available for use in the event of electronic failure or treatment must be discontinued until repair is made. If treatment is to be discontinued, this policy shall be included in the written safety procedures. A copy of the safety procedures shall be provided to the operator.
- (d) Additional requirements. Treatment rooms which contain an x-ray system capable of operating above 150 kVp shall meet the following additional requirements:
- (i) All necessary shielding, except for any beam interceptor, shall be provided by fixed barriers;
- (ii) The control panel shall be outside the treatment room;
- (iii) All doors of the treatment room shall be electronically connected to the control panel such that x-ray production cannot occur unless all doors are closed;
- (iv) When the doors referred to in (d)(iii) of this subsection are opened while the x-ray tube is activated:
- (A) X-ray production shall terminate within one second; or
- (B) The radiation at a distance of one meter from the source shall be reduced to less than 100 milliroentgens per hour within one second.
- (v) After the radiation output of the x-ray tube has been affected by the opening of any door referred to in (d)(iii) of this subsection, it shall be possible to restore the x-ray system to full operation only upon:
 - (A) Closing the door; and subsequently
 - (B) Reinitiating the exposure at the control panel.
 - (e) Calibrations.
- (i) The calibration of an x-ray system shall be performed at intervals not to exceed one year and after any change or replacement of components which could cause a change in the radiation output.
- (ii) The calibration of the radiation output of the x-ray system shall be performed by or under the direction of a qualified expert who is physically present at the facility during such calibration.
- (iii) Calibration of the radiation output of an x-ray system shall be performed with a calibrated instrument. The calibration of such instrument shall be directly

- traceable on a national standard. The instrument shall have been calibrated within the preceding two years.
- (iv) The calibrations made pursuant to (e)(i) of this subsection shall be such that the dose at a reference point in soft tissue can be calculated to within \pm five percent.
- (v) The calibration of the x-ray system shall include, but not be limited to, the following determinations:
- (A) Verification that the x-ray system is operating in compliance with the design specifications;
- (B) The exposure rates for each combination of field size, technique factors, filter, and treatment distance used;
- (C) The degree of congruence between the radiation field and the field indicated by the localizing device if such device is present; and
- (D) An evaluation of the uniformity of the radiation field symmetry for the field sizes used and any dependence upon tube housing assembly orientation.
- (vi) Records of calibration performed pursuant to (e) of this subsection shall be maintained by the registrant for two years after completion of the calibration.
- (vii) A copy of the most recent x-ray system calibration shall be available for use by the operator at the control panel.
 - (f) Operating procedures.
- (i) When a patient must be held in position for radiation therapy, mechanical supporting or restraining devices shall be used;
- (ii) The tube housing assembly shall not be held by an individual during exposures;
- (iii) No individual other than the patient shall be in the treatment room unless such individual is protected by a barrier sufficient to meet the requirements of chapter 402–24 WAC. No individual other than the patient shall be in the treatment room during exposures when the kVp exceeds 150;
- (iv) The x-ray system shall not be used in the administration of radiation therapy unless the requirements of (e) of this subsection have been met.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–225–120, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–28–091, filed 12/11/86; 83–19–050 (Order 2026), § 402–28–091, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–28–091, filed 12/8/80.]

- WAC 246-225-130 X-ray and electron therapy systems with energies of one MeV and above. Chapter 402-44 WAC except WAC 402-44-110 (3) and (4) shall apply to medical facilities using therapy systems with energies 1 MeV and above.
- (1) Definitions. In addition to the definitions provided in WAC 402-28-020, the following definitions shall be applicable to this section.
- (a) "Applicator" means a structure which indicates the extent of the treatment field at a given distance from the virtual source and which may or may not incorporate the beam limiting device.
- (b) "Beam scattering filter" means a filter used in order to scatter a beam of electrons.

- (c) "Central axis of the beam" means a line passing through the virtual source and the center of the plane figure formed by the edge of the final beam limiting device.
- (d) "Dose monitoring system" means a system of devices for the detection and display of quantities of radiation.
- (e) "Dose monitor unit" means a unit from which the absorbed dose can be calculated.
- (f) "Existing equipment" means therapy systems subject to this section which were manufactured on or before the effective date of these regulations.
- (g) "Field flattening filter" means a filter used to homogenize the dose rate over the area of a useful beam of x-rays.
- (h) "Field size" means the dimensions of an area in a plane perpendicular to the specified direction of the beam of incident radiation at a specified depth in a phantom and defined by specified isodose lines.
- (i) "Gantry" means that part of the system supporting and allowing possible movements of the radiation head.
- (j) "Interruption of irradiation" means the stopping of irradiation with the possibility of continuing irradiation without resetting of the operating conditions at the control panel.
- (k) "Isocenter" means a fixed point in space located at the intersection of the rotation axes of the principal movements of the therapy system.
- (l) "Moving beam therapy" mean radiation therapy with relative displacement of the useful beam and the patient during irradiation.
- (m) "New equipment" means systems subject to this section which were manufactured after effective date of these regulations.
- (n) "Normal treatment distance" means the distance between the virtual source and a reference point on the central axis of the beam. The reference is located at a position where the patient will be placed during radiation therapy.
- (o) "Patient" means an individual subjected to examination and treatment.
- (p) "Phantom" means a volume of material behaving in a manner similar to tissue with respect to the attenuation and scattering of radiation.
- (q) "Primary dose monitoring system" means a system which will monitor the quantity of radiation produced during irradiation and which will terminate irradiation when a preselected number of dose monitor units have been acquired.
- (r) "Radiation treatment prescription" means the absorbed dose which is intended to be delivered to the treatment volume.
- (s) "Radiation head" means the structure from which the useful beam emerges.
- (t) "Redundant dose monitoring combination" means a combination of two dose monitoring systems in which both systems are arranged to terminate irradiation in accordance with a preselected number of dose monitor units.

- (u) "Secondary dose monitoring system" means a system which will terminate irradiation in the event of failure of the primary system.
- (v) "Shadow tray" means a device attached to the radiation head to support auxiliary beam limiting material.
- (w) "Stationary beam therapy" means radiation therapy without relative displacement of the useful beam and the patient during irradiation.
- (x) "Target" means that part of a radiation source which intercepts a beam of accelerated particles with subsequent emission of other radiation.
- (y) "Termination of irradiation" means the stopping of irradiation in a fashion which will not permit continuance of irradiation without the resetting of operating conditions at the control panel.
- (z) "Treatment field" means the area of the patient's skin which is to be irradiated.
- (aa) Treatment volume means that portion of the patient's body which is to be irradiated.
- (bb) "Virtual source" means a point from which radiation appears to originate.
 - (2) Requirements for equipment.
 - (a) Leakage radiation to the patient area.
- (i) New equipment should meet the following requirements:
- (A) For all operating conditions, the dose equivalent in rem due to leakage radiation, including x-ray, electrons, and neutrons, at any point in a circular plane of two meters radius centered on and perpendicular to the central axis of the beam at the normal treatment distance and outside the maximum useful beam, should not exceed 0.1 percent of the maximum dose equivalent in rem of the unattenuated useful beam measured at the point of intersection of the central axis of the beam and the plane surface. Measurements shall be averaged over an area up to but not exceeding one hundred square centimeters at the positions specified.
- (B) For each system the registrant shall determine, or obtain from the manufacturer, the leakage radiation existing at the positions specified in (a)(i)(A) of this subsection for specified operating conditions. Records for leakage radiation shall be maintained at the installation for inspection by the department.
- (ii) Existing equipment (that installed prior to the effective date of the regulations) should meet the following requirements:
- (A) The leakage radiation, excluding neutrons, at any point in the area specified by (a)(i)(A) of this subsection, where such area intercepts the central axis of the beam one meter from the virtual source, should not exceed 0.1 percent of the maximum dose equivalent in rems of the unattenuated useful beam measured at the point of intersection of the central axis of the beam and the surface of the reference circular plane. Measurements should be averaged over an area up to but not exceeding one hundred square centimeters at the positions specified.
- (B) For each system, the registrant should determine, or obtain from the manufacturer, the leakage radiation existing at the positions specified in (a)(ii)(A) of this subsection for specified operating conditions. Records

for radiation leakage shall be maintained at the installation for inspection by the department.

- (b) Leakage radiation outside the patient area.
- (i) The dose equivalent in rem due to leakage radiation, except in the area specified in (a) of this subsection, when measured at any point one meter from the path of the charged particle, before the charged particle strikes the target or window, should not exceed 0.1 percent for x-ray leakage nor 0.5 percent for neutron leakage of the maximum dose equivalent in rems of the unattenuated useful beam measured at the point of intersection of the central axis of the beam and the circular plane specified in (a) of this subsection.
- (ii) The registrant should determine, or obtain from the manufacturer, the actual leakage radiation existing at the positions specified in (a) of this subsection for specified operating conditions. Measurements should be averaged over an area up to but not exceeding one hundred square centimeters at the positions specified.
- (c) Beam limiting devices. Adjustable or interchangeable beam limiting devices shall be provided and such devices shall transmit no more than two percent of the useful beam for the portion of the useful beam which is to be attenuated by the beam limiting device. The neutron component of the useful beam shall not be included in this requirement. Measurements shall be averaged over an area up to but not exceeding one hundred square centimeters at the normal treatment distance.
 - (d) Filters.
- (i) If the absorbed dose rate information required by (p) of this subsection is dependent on operation with a field flattening or beam scattering filter in place, such filter shall be removable only by the use of tools.
- (ii) In systems which utilize a system of wedge filters, interchangable field flattening filters, or interchangeable beam scattering filters:
- (A) Irradiation shall not be possible until a selection of a filter has been made at the treatment control panel;
- (B) An interlock system shall be provided to prevent irradiation if the filter selected is not in the correct position;
- (C) An indication of the wedge filter orientation with respect to the treatment field shall be provided at the control panel, by direct observation or by electronic means, when wedge filters are used;
- (D) A display shall be provided at the treatment control panel showing the filter(s) in use;
- (E) Each filter which is removable from the system shall be clearly identified as to that filter's material of construction, thickness, and the wedge angle for wedge filters; and
- (F) An interlock shall be provided to prevent irradiation if any filter selection operation carried out in the treatment room does not agree with the filter selection operation carried out at the treatment control panel.
- (e) Beam quality. The registrant shall determine, or obtain from the manufacturer, data sufficient to assure that the following beam quality requirements are met:
- (i) The absorbed dose resulting from x-rays in a useful electron beam at a point on the central axis of the

beam ten centimeters greater than the practical range of the electrons shall not exceed the values stated in Table III. Linear interpolation shall be used for values not stated.

TABLE III

	X-ray Absorbed Dose as a Fraction of Maximum Absorbed Dose
1	0.03
15	0.05
35	0.10
50	0.20

- (ii) Compliance with (e)(i) of this subsection shall be determined using:
- (A) A measurement within a phantom with the incident surface of the phantom at the normal treatment distance and normal to the central axis of the beam;
- (B) The largest field size available which does not exceed fifteen centimeters by fifteen centimeters; and
- (C) A phantom whose cross-sectional dimensions exceed the measurement radiation field by at least five centimeters and whose depth is sufficient to perform the required measurement.
- (iii) The absorbed dose at a surface located at the normal treatment distance, at the point of intersection of that surface with the central axis of the useful beam during x-ray irradiation, shall not exceed the limits stated in Table IV. Linear interpolation shall be used for values not stated.

TABLE IV

Maximum Photon Endin MeV	ergy Absorbed Dose at the Surface as a Fraction of the Maximum Absorbed Dose
1	0.80
2	0.70
5	0.60
15	0.50
35	0.40
50	0.20

- (iv) Compliance with (e)(iii) of this subsection shall be determined by:
- (A) Measurements made within a phantom using an instrument which will allow extrapolation to the surface absorbed dose;
- (B) Use of a phantom whose size and placement meet the requirements of (e)(iii) of this subsection;
- (C) Removal of all beam modifying devices which can be removed without the use of tools, except for beam scattering or beam flattening filters; and
- (D) The largest field size available which does not exceed fifteen centimeters by fifteen centimeters.

- (v) The registrant shall determine, or obtain from the manufacturer, the maximum percentage absorbed dose due to stray neutrons in the useful beam for specified operating conditions.
- (f) Beam monitors. All therapy systems shall be provided with radiation detectors in the radiation head.
- (i) New equipment shall be provided with at least two radiation detectors. The detectors shall be incorporated into two monitoring systems arranged either as a primary/primary combination or as a primary/secondary combination.
- (ii) Existing equipment shall be provided with at least one radiation detector. This detector shall be incorporated into a primary system.
- (iii) The detectors and system into which the detector is incorporated shall meet the following requirements:
- (A) Each primary system shall have a detector which is a transmission full beam detector and which is placed on the patient side of any fixed added filters other than a wedge filter.
- (B) The detectors shall be removable only with tools and shall be interlocked to prevent incorrect positioning.
- (C) Each detector shall be capable of independently monitoring and controlling the useful beam.
- (D) Each detector shall form part of a dose monitoring system from whose readings in dose monitor units the absorbed dose at a reference point in the treatment volume can be calculated.
- (E) For new equipment the design of the dose monitoring systems of (h) of this subsection shall assure that the malfunctioning of one system shall not affect the correct functioning of the second system. In addition:
- (I) The failure of any element common to both systems shall terminate the useful beam.
- (II) The failure of any element common to both systems which could affect the correct operation of both systems shall terminate irradiation.
- (F) Each dose monitoring system shall have a legible display at the treatment control panel. Each display shall:
- (I) Maintain a reading until intentionally reset to zero;
- (II) Have only one scale and no scale multiplying factors in new equipment; and
- (III) Utilize a design such that increasing dose is displayed by increasing numbers and shall be so designed that, in the event of an overdosage of radiation, the absorbed dose may be accurately determined under all normal conditions of use or foreseeable failures.
- (G) In the event of power failure, the dose monitoring information required in (h) of this subsection displayed at the control panel at the time of failure shall be retrievable in at least one system.
 - (g) Beam symmetry.
- (i) For new equipment, each therapy machine shall have the capability of comparing the dose rates in each of the four quadrants of the central eighty percent of the useful beam. Beam symmetry information shall be displayed at the treatment control panel, and such display shall be capable of indicating a differential of more than five percent between any two of the quadrant dose rates.

- Beam asymmetry in excess of twenty percent shall automatically terminate the useful beam.
- (ii) Beam symmetry requirements of (g)(i) of this subsection shall be met if the user can demonstrate to the satisfaction of the department that adequate fail—safe protection against the beam asymmetry is incorporated into the inherent design of the accelerator.
- (iii) On existing equipment where the department has determined that beam symmetry is inadequate the use of an automatic beam asymmetry warning system may be required.
 - (h) Selection and display of dose monitor units.
- (i) Irradiation shall not be possible until a selection of a number of dose monitor units has been made at the treatment control panel.
- (ii) After useful beam termination, it shall be necessary manually to reset the preselected dose monitor units before treatment can be reinitiated.
- (iii) The preselected number of dose monitor units shall be displayed at the treatment control panel until reset manually for the next irradiation.
- (i) Termination of irradiation by the dose monitoring system.
- (i) Each of the required monitoring systems shall be capable of independently terminating an irradiation. Provision shall be made to test the correct operation of each system.
- (ii) Each primary system shall terminate irradiation when the preselected number of dose monitor units has been detected by the system.
- (iii) Each secondary system shall terminate irradiation when 102 percent of the preselected number of dose monitor units has been detected by the system.
- (iv) For new equipment, indicators on the control panel shall show which monitoring system has terminated the beam.
- (j) Interruption switches. It shall be possible to interrupt irradiation and equipment movements at any time from the operator's position at the treatment control panel. Following any interruption, it shall be possible to restart irradiation by operator action without any reselection of operating conditions. If any change is made of a preselected value during an interruption the equipment shall go to termination condition.
- (k) Termination switches. It shall be possible to terminate irradiation and equipment movements, or go from an interruption condition to termination conditions, at any time from the operator's position at the treatment control panel.
 - (1) Timer.
- (i) A timer shall be provided which has a display at the treatment control panel. The timer shall be graduated in minutes and decimals of minutes. The timer shall have a preset time selector and an elapsed time indicator.
- (ii) The timer shall be a cumulative timer which switches on and off with the radiation and retains its reading after irradiation is interrupted or terminated. It shall be necessary to zero and subsequently reset the elapsed time indicator and the preset time selector after

irradiation is terminated before irradiation shall again be possible.

- (iii) The timer shall terminate irradiation when a preselected time has elapsed if the dose monitoring systems fail to do so.
- (m) Selection of radiation type. Equipment capable of both x-ray therapy and electron therapy shall meet the following requirements:
- (i) Irradiation shall not be possible until a selection of radiation type has been made at the treatment control panel.
- (ii) An interlock system shall be provided to insure that the equipment can emit only the radiation type which has been selected.
- (iii) An interlock system shall be provided to prevent irradiation if any selected operations carried out in the treatment room do not agree with the selected operations carried out in the treatment control panel.
- (iv) An interlock system shall be provided to prevent irradiation with x-rays when electron applicators are fitted and irradiation with electrons when accessories for x-ray therapy are fitted.
- (v) The radiation type selected shall be displayed at the treatment control panel before and during irradiation.
- (n) Selection of energy. Equipment capable of generating radiation beams of different energies shall meet the following requirements:
- (i) Irradiation shall not be possible until a selection of energy has been made at the treatment control panel.
- (ii) An interlock system shall be provided to insure that the equipment can emit only the energy of radiation which has been selected.
- (iii) An interlock system shall be provided to prevent irradiation if any selected operations carried out in the treatment room do not agree with the selected operations carried out at the treatment control panel.
- (iv) The energy selected shall be displayed at the treatment control panel before and during irradiation.
- (o) Selection of stationary beam therapy or moving beam therapy. Equipment capable of both stationary beam therapy and moving beam therapy shall meet the following requirements:
- (i) Irradiation shall not be possible until a selection of stationary beam therapy or moving beam therapy has been made at the treatment control panel.
- (ii) An interlock system shall be provided to insure that the equipment can operate only in the mode which has been selected.
- (iii) An interlock system shall be provided to prevent irradiation if any selected operations carried out in the treatment room do not agree with the selected operations carried out at the treatment control panel.
- (iv) An interlock system shall be provided to terminate irradiation if the movement stops during moving beam therapy.
- (v) Moving beam therapy shall be so controlled that the required relationship between the number of dose monitor units and movement is obtained.
- (vi) The mode of operation shall be displayed at the treatment control panel.

- (p) Absorbed dose rate. For new equipment, a system shall be provided from whose readings the absorbed dose rate at a reference point in the treatment volume can be calculated.³ In addition:
- (i) The quotient of the number of dose monitor units by time shall be displayed at the treatment control panel.
- (ii) If the equipment can deliver, under any conditions, an absorbed dose rate at the normal treatment distance more than twice the maximum value specified by the manufacturer's anticipated dose rate for any machine parameters utilized, a device shall be provided which terminates irradiation when the absorbed dose rate exceeds a value twice the specified maximum. The value at which the irradiation will be terminated shall be in a record maintained by the registrant.
- (q) Location of focal spot and beam orientation. The registrant shall determine, or obtain from the manufacturer, the location with reference to an accessible point on the radiation head of:
 - (i) The x-ray target or the virtual source of x-rays;
 - (ii) The electron window or the scattering foil;
 - (iii) All possible orientations of the useful beam.
- (r) System interlock checks. Capabilities shall be provided so that all radiation safety interlocks can be checked. When preselection of any of the operating conditions requires action in the treatment room and at the treatment control panel, selection at one location shall not give a display at the other location until the requisite selected operations in both locations have been completed.
- (s) Shadow trays shall be designed such that the skin entrance—dose due to electrons produced within the shadow tray are minimized.
- (t) Facility and shielding requirements. In addition to chapter 402-24 WAC, the following design requirements shall apply:
- (i) Except for entrance doors or beam interceptors, all the required barriers shall be fixed barriers.
- (ii) The treatment control panel shall be located outside the treatment room.
- (iii) Windows, mirrors, closed-circuit television, or other equivalent viewing systems shall be provided to permit continuous observation of the patient during irradiation and shall be so located that the operator may observe the patient from the treatment control panel. When the viewing system is by electronic means (e.g., television), an alternate viewing system shall be provided for use in the event of failure of the primary system.
- (iv) Provision shall be made for two-way aural communication between the patient and the operator at the treatment control panel. However, where excessive noise levels make aural communications impractical, other methods of communication shall be used.
- (v) Treatment rooms to which access is possible through more than one entrance shall be provided with warning lights, which will indicate when the useful beam is "on" in a readily observable position near the outside of all access doors.
- (vi) Interlocks shall be provided such that all entrance doors shall be closed before treatment can be initiated or

continued. If the radiation beam is interrupted by any door opening, it shall be possible to restore the machine to operation only by closing the door and reinitiating exposure by manual action at the control panel.

- (u) Surveys, calibrations, spot checks and operating procedures.
 - (i) Survey.
- (A) All new facilities, and existing facilities not previously surveyed, shall have a survey made by, or under the direction of, a qualified expert. Such surveys shall also be done after any change in the facility or equipment which might cause a significant increase in radiation hazard.
- (B) The registrant shall obtain a written report of the survey from the qualified expert and a copy of the report shall be transmitted by the registrant to the department.
- (C) The report shall indicate all instances where the installation, in the opinion of the qualified expert, is in violation of applicable regulations and shall cite the section violated.
 - (ii) Calibrations.
- (A) The calibration of systems subject to this section shall be performed before the system is first used for irradiation of patient and thereafter at time intervals which do not exceed six months and after any change which might significantly alter the calibration, spatial distribution, or other characteristics of the therapy beam.
- (B) The calibration shall be performed under the direct supervision of a qualified expert.
- (C) Calibration of the dose equivalent of the therapy beam shall be performed with a measurement instrument the calibration of which is directly traceable to national standards of exposure or absorbed dose and which shall have been calibrated within the preceding two years.
- (D) Calibrations made pursuant to (u)(ii) of this subsection shall be such that the dose at a reference point in soft tissue can be calculated within + 5 percent.
- (E) The calibration of the therapy beam shall include but not be limited to the following determinations:
- (I) Verification that the equipment is operating in compliance with the design specifications concerning the light localizer, the side light and back-pointer alignment with the isocenter, when applicable, variation in the axis of rotation for the table, gantry and jaw system, and beam flatness and symmetry at specified depths.
- (II) The exposure rate or dose rate in air and at various depths of water for the range of field sizes used, for each effective energy, and for each treatment distance used for radiation therapy.
- (III) The congruence between the radiation field and the field indicated by the localizing device.
- (IV) The uniformity of the radiation field and its dependency upon the direction of the useful beam.
- (F) Records of the calibration performed pursuant to (u)(ii) of this subsection shall be maintained by the registrant for two years after completion of the calibration.
- (G) A copy of the latest calibration performed pursuant to (u)(ii) of this subsection shall be available for use by the operator at the treatment control panel.

- (iii) Spot checks. Spot checks shall be performed on the system subject to this section. Such spot checks shall meet the following requirements:
- (A) The spot check procedures shall be in writing and shall have been developed by a qualified expert.
- (B) The measurements taken during spot checks shall demonstrate the degree of consistency of the operating characteristics which can affect the radiation output of the system or the radiation delivered to a patient during a therapy procedure.
- (C) The spot check procedures shall specify the frequency at which tests or measurements are to be performed.
- (D) For systems in which beam quality can vary significantly, spot checks shall include quality checks.
- (E) Where a system has built—in devices which provide a self—check of any parameter during irradiation, the spot check procedures shall require that the parameter be independently verified at specific time intervals.
- (F) The reason for spot checks which are erratic or inconsistent with calibration data shall be promptly investigated and corrected before the system is used for patient irradiation.
- (G) Whenever a spot check indicates a significant change in the operating characteristics of a system, as specified in the qualified expert's spot check procedures, the system shall be recalibrated as required in (u)(ii) of this subsection.
- (H) Records of spot check measurements performed pursuant to (u)(iii) of this subsection shall be maintained by the registrant for a period of one year or for twice as long as the spot check cycle, whichever is greater.
 - (I) Operating procedures.
- (I) No individual other than the patient shall be in the treatment room during treatment of a patient.
- (II) If a patient must be held in position during treatment, mechanical supporting or restraining devices shall be used.
- (III) The system shall not be used in the administration of radiation therapy unless (u)(i), (ii), and (iii) of this subsection have been met.

³The radiation detectors specified in (f) of this subsection may form part of this system.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–225–130, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–28–101, filed 12/11/86. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–28–101, filed 12/8/80.]

WAC 246-225-140 Veterinary medicine radiographic installations. (1) Equipment.

(a) The protective tube housing shall be of diagnostic type.

See WAC 402–28–035(4).

(b) Diaphragms, cones, or a stepless adjustable collimator shall be used for collimating the useful beam to the area of clinical interest and shall provide the same degree of protection as is required of the housing. Cones or diaphragms, if used, shall be marked with their field size and the distance at which they are to be used.

- (c) The total filtration permanently in the useful beam shall not be less than 0.5 millimeters aluminum equivalent for machines operating up to 50 kVp, 1.5 millimeters aluminum equivalent for machines operating between 50–70 kVp, and 2.5 millimeters aluminum equivalent for machines operating above 70 kVp.
- (d) A device shall be provided to terminate the exposure after a preset time or exposure. It must not be possible for the device to allow an exposure when preset at "zero" or "off."
- (e) A dead—man type of exposure switch shall be provided, together with an electrical cord of sufficient length, so that the operator can stand out of the useful beam and at least 1.8 meters from the animal during all x-ray exposures.
- (f) Reproducibility requirements—See WAC 402-28-054.
- (2) Structural shielding. All wall, ceiling, and floor areas shall be equivalent to or provided with applicable protective barriers as required in WAC 402-28-032(1).
 - (3) Operating procedures.
- (a) In any application in which the operator is not located behind a protective barrier, clothing consisting of a protective apron having a lead-equivalent of not less than 0.5 millimeters shall be worn by the operator and any other individuals in the room during exposures.
- (b) No individual other than the operator shall be in the x-ray room while exposures are being made unless such individual's assistance is required.
- (c) When an animal or film must be held in position during radiography, mechanical supporting or restraining devices should be used. If the animal must be held by an individual, that individual shall be protected with appropriate shielding devices, such as protective gloves and apron, and that individual shall be so positioned that no part of that individual's body will be struck by the useful beam. The requirements of WAC 402-24-070, Personnel monitoring, and 402-28-031 (2)(h)(iv) apply to such individuals.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–225–140, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–28–110, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–28–110, filed 12/8/80; Order 1084, § 402–28–110, filed 1/14/76; Order 1, § 402–28–110, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-225-150 X-ray film developing requirements. Compliance with this section is required of all healing arts registrants and is designed to ensure that the patient and operator exposure is minimized and to produce optimum image quality and diagnostic information.

- (1) Manual processing of films:
- (a) The following relationship between temperature of the developer and development time must be used (standard chemistry only):

THERMOMETER READINGS (DEGREES) C F	MINIMUM DEVELOPING TIMES (MINUTES)
27 - 80 79 78	2 2 2 1/2
77 24 – 76 75	2 2 2 1/2 2 1/2 3 3 3 1/2 3 1/2 4
74 73 22 - 72	3 1/2 3 1/2 4
71 70 69	4 1/2
20 - 68 67 66	4 1/2 5 5 1/2
65 18 - 64	5 1/2 6 6 1/2
63 62 61	7 8 8 1/2
16 - 60	9 1/2

- (b) Processing of film. All films shall be processed in such a fashion as to achieve adequate sensitometric performance. This criterion shall be adjudged to have been met if:
- (i) Film manufacturer's published recommendations for time and temperature are followed, or
- (ii) Each film is developed in accordance with the time-temperature chart. (See (a) of this subsection.)
 - (c) Devices shall be available which will:
 - (i) Give the actual temperature of the developer and
- (ii) Give an audible or visible signal indicating the termination of a preset time (in minutes).
 - (d) Chemical-film processing control.
- (i) Chemicals shall be mixed in accordance with the chemical manufacturer's recommendations.
- (ii) Developer replenisher shall be periodically added to the developer tank based on the recommendations of the chemical or film manufacturer. Solution may be removed from the tank to permit the addition of an adequate volume of replenisher.
- (iii) All processing chemicals shall be completely replaced at least every two months.
- (2) Automatic film processing. Films shall be processed in such a manner that the degree of film development is the same as would be achieved by proper adherence to subsection (1) of this section (manual processing).
- (3) Darkrooms. Darkrooms shall be constructed so that film being processed, handled, or stored will be exposed only to light which has passed through a safelight filter.
- (4) The department shall make such tests as may be necessary to determine compliance with this section.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–225–150, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–28–990, filed 9/16/83; Order 1084, Appendix C (codified as WAC 402–28–990), filed 1/14/76.]

WAC 246-225-99910 Appendix I-Good practices. The following are included in this handbook of regulations as suggested good practices and are not intended to be a regulation. The topics presented in these good practices may, however, become incorporated into the Washington Administrative Code at a future date.

- (1) Imaging systems. Procedures and auxiliary equipment designed to minimize patient and personnel exposure commensurate with the needed diagnostic information should be utilized. This is interpreted to include but not limited to:
- (a) The fastest speed films and screens should be utilized consistent with the diagnostic objective of the examination.
- (b) The radiation exposure to the patient should be the minimum exposure required to produce images of good diagnostic quality.
- (2) Patient log. Each facility should keep a patient log which will indicate the following information as a minimum:
- (a) Identification of the patient, including name, facility identification number or social security number, age, and sex.
 - (b) Date of x-ray examination.
- (c) Examination or treatment given, technique factors used, and number of exposures.
- (d) Any deviation from the standard procedure or technique (including all repeat exposures) as denoted in the technique chart required in WAC 402-28-031 (2)(c).
 - (e) When applicable, the x-ray system used.
- (f) Name or cross index of individuals who performed the exam.
- (3) Human holder log. A record should be made of the examination and shall include the name of the human holder, date of the examination, number of exposures and technique factors utilized for the exposure(s).
- (4) Exchange of information. Because patient exposure to diagnostic x-rays is the most predominant source of exposure to artificially produced ionizing radiation, radiographs should be exchanged among the practitioners of the various healing arts. Such exchange can only benefit patients by reducing the unnecessary repeated exposures of patients who are referred to, or change to, other practitioners.
- (5) Patient exposure guidelines. The following patient exposure values should be achievable with high speed image receptor systems, proper filtration, a reasonable radiographic density preference, and proper film development. State radiation safety surveyors can provide registrants with results of measurements of patient exposure values upon request.

Dental Bitewing

	Upper Limit of
KVP	Skin Entrance
Range Utilized	Exposure, mR
50 - 64	350
65 - 70	300
71 - 80	250
81 - 90	200

Medical

Exam* Abdomen Lumbar spine Cervical spine Skull	Upper Limit of Skin Entrance Exposure, mR 600 600 200 200
Chest	20

*On average-size patient

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–225–99910, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–28–99001, filed 9/16/83; Order 1084, Appendix D (codified as WAC 402–28–99001), filed 1/14/76.]

WAC 246-225-99920 Appendix II--Determination of competency. The following are areas in which the department of social and health services considers it important that an individual develop expertise for the competent operation of x-ray equipment.

- (1) Familiarization with equipment.
- (a) Identification of controls.
- (b) Function of each control.
- (c) Suggested settings for routine examinations.
- (2) Radiation protection.
- (a) Collimation
- (b) Filtration
- (c) Gonad shielding
- (d) Restriction of x-ray tube radiation to the image receptor.
 - (e) Personnel protection.
 - (f) Grids
 - (3) Film processing.
 - (a) Film speed as relates to patient exposure.
 - (b) Film processing parameters.
 - (4) Emergency procedures.
- (a) Termination of exposure in event of automatic timing device failure.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–225–99920, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–28–99003, filed 9/16/83; Order 1084, Appendix F (codified as WAC 402–28–99003), filed 1/14/76.]

WAC 246-225-99930 Appendix III—Information to be submitted by persons proposing to conduct healing arts screening using ionizing radiation. Persons requesting that the department approve a healing arts screening program shall submit the following information and evaluation:

- (1) Name and address of the applicant and, where applicable, the names and addresses of agents within this state.
- (2) Diseases or conditions and frequency for which the x-ray examinations are to be used.
- (3) Description in detail of the x-ray examinations proposed in the screening program.
- (4) Description of the population to be examined in the screening program, i.e., age, sex, physical condition, and other appropriate information.
- (5) An evaluation of any known alternate methods not involving ionizing radiation which could achieve the goals of the screening program and why these methods are not used in preference to the x-ray examinations.
- (6) An evaluation by a qualified expert of the x-ray system(s) to be used in the screening program. The evaluation by the qualified expert shall show that such system(s) satisfy all requirements of these regulations.
- (7) A description of the diagnostic film quality control program.
- (8) A copy of the technique chart for the x-ray examination procedures to be used.
- (9) The qualifications of each individual who will be operating the x-ray system(s).
- (10) The qualifications of the individual who will be supervising the operators of the x-ray system(s). The extent of supervision and the method of work performance evaluation shall be specified.
- (11) The name and address of the individual who will interpret the radiograph(s).
- (12) A description of the procedure to be used in advising the individuals screened and their private practitioners of the healing arts of the results of the screening procedure and any further medical needs indicated.
- (13) A description of the procedures for the retention or disposition of the radiographs and other records pertaining to the x-ray examinations.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–225–99930, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–28–99004, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–28–99004, filed 12/8/80.]

Chapter 246-228 WAC

RADIATION PROTECTION—ANALYTICAL X-RAY EQUIPMENT

WAC 246-2

246-228-001 Purpose and scope. 246-228-010 Definitions.

246-228-020 Equipment requirements. 246-228-030 Facility requirements.

246-228-040 Operating requirements. 246-228-050 Personnel requirements.

WAC 246-228-001 Purpose and scope. This chapter provides special requirements for analytical x-ray equipment. The requirements of this chapter are in addition to, and not in substitution for, applicable requirements in other chapters of these regulations.

[Statutory Authority: RCW 43.70,040. 91–02–049 (Order 121), recodified as $\ 246-228-001$, filed 12/27/90, effective 1/31/91; Order 1084, $\ 402-40-010$, filed 1/14/76.]

- WAC 246-228-010 Definitions. (1) "Analytical x-ray equipment" means equipment used for x-ray diffraction or fluorescence analysis.
- (2) "Analytical x-ray system" means a group of components utilizing x-rays to determine the elemental composition or to examine the microstructure of materials.
- (3) "Fail-safe characteristics" mean a design feature which causes beam port shutters to close, or otherwise prevents emergence of the primary beam, upon the failure of a safety or warning device.
- (4) "Local components" mean parts of an analytical x-ray system and include areas that are struck by x-rays such as radiation source housings, ports and shutter assemblies, collimators, sample holders, cameras, goniometers, detectors, and shielding, but do not include power supplies, transformers, amplifiers, readout devices, and control panels.
- (5) "Normal operating procedures" mean step-bystep instructions necessary to accomplish the analysis. These procedures shall include sample insertion and manipulation, equipment alignment, routine maintenance by the registrant, and data recording procedures which are related to radiation safety.
- (6) "Open-beam configuration" means a mode of operation of an analytical x-ray system in which an individual could accidentally place some part of their body into the primary beam during normal operation if no further safety devices are incorporated.
- (7) "Primary beam" means ionizing radiation which passes through an aperture of the source housing via a direct path from the x-ray tube located in the radiation source housing.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-228-010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-40-020, filed 12/8/80; Order 1084, § 402-40-020, filed 1/14/76.]

- WAC 246-228-020 Equipment requirements. (1) Safety device. A device which prevents the entry of any portion of an individual's body into the primary x-ray beam path, or which causes the beam to be shut off upon entry into its path, shall be provided for all openbeam configurations. A registrant or licensee may apply to the department for an exemption from the requirement of a safety device. Such application shall include:
- (a) A description of the various safety devices that have been evaluated;
- (b) The reason each of these devices cannot be used; and
- (c) A description of the alternative methods that will be employed to minimize the possibility of an accidental exposure, including procedures to assure that operators and others in the area will be informed of the absence of safety devices.
- (2) Warning devices. Open-beam configurations shall be provided with a readily discernible indication of:

- (a) X-ray tube status (ON-OFF) located near the radiation source housing, if the primary beam is controlled in this manner and at or near the port and/or
- (b) Shutter status (OPEN-CLOSED) located near each port on the radiation source housing, if the primary beam is controlled in this manner.
- (c) Warning devices shall be labeled so that their purpose is easily identified and the devices shall be conspicuous at the beam port. On new equipment installed after January 1, 1976, warning devices shall have fail—safe characteristics.
- (3) Ports. Unused ports on radiation source housings shall be secured in the closed position in a manner which will prevent casual opening. Such security requirement will be deemed met if the beam port cannot be opened without the use of tools not part of the closure for units installed after January 1, 1981.
- (4) Labeling. All analytical x-ray equipment shall be labeled with a readily discernible sign or signs bearing the radiation symbol and the words:
- (a) "CAUTION HIGH INTENSITY X-RAY BEAM," or words having a similar intent, on the x-ray source housing; and
- (b) "CAUTION RADIATION THIS EQUIPMENT PRODUCES RADIATION WHEN ENERGIZED," or words having a similar intent, near any switch that energizes an x-ray tube if the radiation source is an x-ray tube; or
- (c) "CAUTION RADIOACTIVE MATERIAL," or words having a similar intent, on the source housing if the radiation source is a radionuclide.
- (5) Shutters. On new equipment employing openbeam configurations installed after January 1, 1981, each port on the radiation source housing shall be equipped with a shutter that cannot be opened unless a collimator or a coupling has been connected to the port.
- (6) Warning lights. An easily visible warning light labeled with the words "X-RAY ON," or words having a similar intent, shall be located:
- (a) Near any switch that energizes an x-ray tube and near any x-ray port and shall be illuminated only when the tube is energized; or
- (b) In the case of a radioactive source, near any switch that opens a housing shutter, and shall be illuminated only when the shutter is open.
- (c) On equipment installed after January 1, 1981, warning lights shall have fail—safe characteristics.
- (7) Radiation source housing. Each x-ray tube housing shall be so constructed that with all shutters closed the leakage radiation measured at a distance of 5 cm from its surface is not capable of producing a dose equivalent in excess of 2.5 mrem in one hour at any specified tube rating. If radioactive sources are used, corresponding dose limits shall not exceed 2.5 mrem per hour.
- (8) Generator cabinet. Each x-ray generator shall be supplied with a protective cabinet which limits leakage radiation measured at a distance of 5 cm from its surface such that it is not capable of producing a dose equivalent in excess of 0.25 mrem in one hour.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–228–020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–40–030, filed 12/8/80; Order 1084, § 402–40–030, filed 1/14/76.]

- WAC 246-228-030 Facility requirements. (1) Radiation levels. The local components of an analytical x-ray system shall be located and arranged and shall include sufficient shielding or access control such that no radiation levels exist in any area surrounding the local component group which could result in a dose to an individual present therein in excess of the dose equivalent limits given in WAC 402-24-040 of these regulations. For systems utilizing x-ray tubes, these levels shall be met at any specified tube rating.
- (2) Surveys. Radiation surveys, as required by WAC 402-24-085 of all analytical x-ray systems, sufficient to show compliance with WAC 402-40-040(1), shall be performed:
- (a) Upon installation of the equipment, and at least once every twelve months thereafter;
- (b) Following any change in the initial arrangement, number, or type of local components in the system;
- (c) Following any maintenance requiring the disassembly or removal of a local component in the system;
- (d) During the performance of maintenance and alignment procedures if the procedures require the presence of a primary x-ray beam when any local component in the system is disassembled or removed;
- (e) Any time a visual inspection of the local components in the system reveals an abnormal condition; and
- (f) Whenever personnel monitoring devices required in WAC 402-40-060(2)show a significant increase over the previous monitoring period or the readings are approaching 1/10 of the hands and forearm limit specified in WAC 402-24-020.
- (g) Radiation survey measurements shall not be required if a registrant or licensee can demonstrate compliance to the satisfaction of the department with WAC 402-40-040(1) in some other manner.
- (3) Posting. Each area or room containing analytical x-ray equipment shall be conspicuously posted with a sign or signs bearing the radiation symbol and the words "CAUTION X-RAY EQUIPMENT," or words having a similar intent.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–228–030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–40–040, filed 12/8/80; Order 1084, § 402–40–040, filed 1/14/76.]

- WAC 246-228-040 Operating requirements. (1) Procedures. Routine operating procedures shall be written and available to all analytical x-ray equipment workers. No person shall be permitted to operate analytical x-ray equipment in any manner other than that specified in the procedures unless such person has obtained written approval of the radiation safety officer.
- (2) Bypassing. No person shall bypass a safety device unless such person has obtained the written approval of the radiation safety officer. Such approval shall be for a specified period of time. When a safety device has been bypassed, a readily discernible sign bearing the words

"SAFETY DEVICE NOT WORKING," or words having a similar intent, shall be placed on the radiation source housing. The requirements set forth in WAC 402-40-030(1) shall also be met.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-228-040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-40-050, filed 12/8/80; Order 1084, § 402-40-050, filed 1/14/76.]

- WAC 246-228-050 Personnel requirements. (1) Instruction. No person shall be permitted to operate or maintain analytical x-ray equipment unless such person has received instruction in and demonstrated competence as to:
- (a) Identification of radiation hazards associated with the use of the equipment;
- (b) Significance of the various radiation warning and safety devices incorporated into the equipment, or the reasons they have not been installed on certain pieces of equipment and the extra precautions required in such cases;
 - (c) Proper operating procedures for the equipment;
 - (d) Symptoms of an acute localized exposure; and
- (e) Proper procedures for reporting an actual or suspected exposure.
- (2) Personnel monitoring. Finger or wrist dosimetric devices shall be provided to and shall be used by:
- (a) Analytical x-ray equipment workers using systems having an open-beam configuration and not equipped with a safety device; and
- (b) Personnel maintaining analytical x-ray equipment if the maintenance procedures require the presence of a primary x-ray beam when any local component in the analytical x-ray system is disassembled or removed.
- (c) Reported dose values shall not be used for the purpose of determining compliance with WAC 402-24-020 of these regulations unless evaluated by a qualified expert.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-228-050, filed 12/27/90, effective 1/31/91; Order 1084, § 402-40-060, filed 1/14/76.]

Chapter 246-229 WAC

RADIATION PROTECTION—PARTICLE ACCELERATORS

WAC	
246-229-001	Purpose and scope.
246-229-010	Registration requirements.
246-229-020	General requirements for the issuance of a registra-
	tion for particle accelerators.
246-229-030	Human use of particle accelerators.
246-229-040	General provisions.
246-229-050	Limitations.
246-229-060	Shielding and safety design requirements.
246-229-070	Particle accelerator controls and interlock systems.
246-229-080	Warning devices.
246-229-090	Operating procedures.
246-229-100	Radiation monitoring requirements.
246-229-110	Ventilation systems.

WAC 246-229-001 Purpose and scope. (1) This chapter establishes procedures for the registration and the use of particle accelerators.

(2) In addition to the requirements of this chapter, all registrants are subject to the requirements of chapters 402–10, 402–12, 402–16, 402–24, and 402–48 WAC. Registrants engaged in industrial radiographic operations are also subject to the requirements of chapter 402–36 WAC and registrants engaged in the healing arts are also subject to the requirements of chapter 402–28 WAC and/or chapter 402–32 WAC of these regulations. Registrants engaged in the production of radioactive material are also subject to the requirements of chapters 402–19 and 402–22 WAC.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-229-001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-44-010, filed 12/8/80; Order 1084, § 402-44-010, filed 1/14/76.]

WAC 246-229-010 Registration requirements. No person shall receive, possess, use, transfer, own, or acquire a particle accelerator except as authorized in a registration issued pursuant to these regulations or as otherwise provided for in these regulations. The general procedures for registration of particle accelerator facilities are included in chapter 402-16 WAC of these regulations.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-229-010, filed 12/27/90, effective 1/31/91; Order 1084, § 402-44-020, filed 1/14/76.]

WAC 246-229-020 General requirements for the issuance of a registration for particle accelerators. (Refer to chapter 402-16 WAC.) In addition to the requirement of chapter 402-16 WAC a registration application for use of a particle accelerator will be approved only if the department determines that:

- (1) The applicant is qualified by reason of training and experience to use the accelerator in question for the purpose requested in accordance with this chapter in such a manner as to minimize danger to public health and safety or property;
- (2) The applicant's proposed equipment, facilities, operating and emergency procedures are adequate to protect health and minimize danger to public health and safety or property;
- (3) The issuance of the registration will not be inimical to the health and safety of the public, and the applicant satisfies any applicable special requirement in WAC 402-44-040;
- (4) The applicant has appointed a qualified radiation safety officer;
- (5) The applicant and/or the staff has substantial experience in the use of particle accelerators and training sufficient for the intended uses;
- (6) The applicant has established a radiation safety committee to approve, in advance, proposals for uses of particle accelerators, whenever deemed necessary by the department; and
- (7) The applicant has an adequate training program for particle accelerator operators.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-229-020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-44-030, filed 12/8/80; Order 1084, § 402-44-030, filed 1/14/76.]

- WAC 246-229-030 Human use of particle accelerators. In addition to the requirements set forth in chapter 402-16 WAC a certificate of registration for use of a particle accelerator in the healing arts will be issued only if:
- (1) Whenever deemed necessary by the department, the applicant has appointed a medical committee of at least three members to evaluate all proposals for research, diagnostic, and therapeutic use of a particle accelerator. Membership of the committee should include physicians expert in internal medicine, hematology, therapeutic radiology, and a person experienced in depth dose calculations and protection against radiation;
- (2) The individuals designated on the application as the users have substantial training and experience in deep therapy techniques or in the use of particle accelerators to treat humans; and
- (3) The individual designated on the application as the user must be a physician.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–229–030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–44–040, filed 12/8/80; Order 1084, § 402–44–040, filed 1/14/76.]

- WAC 246-229-040 General provisions. (1) This section establishes radiation safety requirements for the use of particle accelerators. The provisions of this section are in addition to, and not in substitution for, other applicable provisions of the regulations.
- (2) The registrant shall be responsible for assuring that all requirements of this chapter are met.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–229–040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–44–050, filed 12/8/80; Order 1084, § 402–44–050, filed 1/14/76.]

- WAC 246-229-050 Limitations. (1) No registrant shall permit any person to act as a particle accelerator operator until such person:
- (a) Has been instructed in radiation safety and shall have demonstrated an understanding thereof;
- (b) Has received copies of and instruction in this chapter and the applicable requirements of chapters 402–24 and 402–48 WAC, pertinent registration conditions and the registrant's operating and emergency procedures, and shall have demonstrated understanding thereof;
- (c) Has demonstrated competence to use the particle accelerator, related equipment, and survey instruments which will be employed in the individual's assignment; and
- (2) The registrant shall maintain records which demonstrate compliance with the requirements of WAC 402-44-060(1).
- (3) Either the radiation safety committee or the radiation safety officer shall have the authority to terminate the operations at a particle accelerator facility if such

action is deemed necessary to protect health and minimize danger to public health and safety or property.

[Statutory Authority: RCW 43.70.040: 91–02–049 (Order 121), recodified as § 246–229–050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–44–060, filed 12/8/80; Order 1084, § 402–44–060, filed 1/14/76.]

- WAC 246-229-060 Shielding and safety design requirements. (1) A qualified expert, specifically accepted by the department, shall be consulted in the design of a particle accelerator installation and called upon to perform a radiation survey when the accelerator is first capable of producing radiation.
- (2) Each particle accelerator installation shall be provided with such primary and/or secondary barriers as are necessary to assure compliance with WAC 402-24-020 and WAC 402-24-040.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–229–060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–44–070, filed 12/8/80; Order 1084, § 402–44–070, filed 1/14/76.]

- WAC 246-229-070 Particle accelerator controls and interlock systems. (1) Instrumentation, readouts and controls on the particle accelerator control console shall be clearly identified and easily discernible.
- (2) All entrances into a target room or other high radiation area shall be provided with interlocks that shut down the machine under conditions of barrier penetration.
- (3) When a radiation safety interlock system has been tripped, it shall only be possible to resume operation of the accelerator by manually resetting controls at the position where the interlock has been tripped, and lastly at the main control console.
- (4) Each safety interlock shall be on a circuit which shall allow its operation independently of all other safety interlocks.
- (5) All safety interlocks shall be fail safe, i.e., designed so that any defect or component failure in the interlock system prevents operation of the accelerator.
- (6) A "scram" button or other emergency power cutoff switch shall be located and easily identifiable in all high radiation areas. Such a cutoff switch shall include a manual reset so that the accelerator cannot be restarted from the accelerator control console without resetting the cutoff switch.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–229–070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–44–080, filed 12/8/80; Order 1084, § 402–44–080, filed 1/14/76.]

- WAC 246-229-080 Warning devices. (1) All locations designated as high radiation areas (except inside treatment rooms designed for human exposure) and entrances to all locations designated as high radiation areas shall be equipped with easily observable flashing or rotating warning lights that operate when, and only when, radiation is being produced.
- (2) Except in facilities designed for human exposure, each high radiation area shall have an audible warning device which shall be activated for 15 seconds prior to

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the possible creation of such high radiation area. Such warning device shall be clearly discernible in all high radiation areas. The registrant shall instruct all personnel in the vicinity of the particle accelerator as to the meaning of this audible warning signal.

(3) Barriers, temporary or otherwise, and pathways leading to high radiation areas shall be identified in accordance with WAC 402-24-090.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-229-080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-44-090, filed 12/8/80; Order 1084, § 402-44-090, filed 1/14/76.]

- WAC 246-229-090 Operating procedures. (1) Particle accelerators, when not in operation, shall be secured to prevent unauthorized use.
- (2) Only a switch on the accelerator control console shall be routinely used to turn the accelerator beam off and on. The safety interlock system shall not be used to turn off the accelerator beam except in an emergency, or as required in WAC 402-44-100(3).
- (3) All safety and warning devices, including interlocks, shall be checked for proper operation at intervals not to exceed three months and after maintenance on such safety and warning devices. Results of such tests shall be maintained for inspection at the accelerator facility.
- (4) Electrical circuit diagrams of the accelerator, and the associated interlock systems, shall be kept current and maintained for inspection by the department and available to the operator at each accelerator facility.
- (5) If, for any reason, it is necessary to bypass a safety interlock or interlocks intentionally, such action shall be:
- (a) Authorized by the radiation safety committee and/or radiation safety officer;
- (b) Recorded in a permanent log and a notice posted at the accelerator control console; and
 - (c) Terminated as soon as possible.
- (6) A copy of the current operating and the emergency procedures shall be maintained at the accelerator control panel.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–229–090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–44–100, filed 12/8/80; Order 1084, § 402–44–100, filed 1/14/76.]

WAC 246-229-100 Radiation monitoring requirements. (1) There shall be available at each particle accelerator facility, appropriate portable monitoring equipment which is operable and has been calibrated for the appropriate radiations being produced at the facility. Such equipment shall be tested for proper operation daily and calibrated at intervals not to exceed six months, and after each servicing and repair.

(2) A radiation protection survey shall be performed and documented by a qualified expert specifically approved by the department when changes have been made in shielding, operation, equipment, or occupancy of adjacent areas.

- (3) Except for facilities designed for human exposure, radiation levels in all high radiation areas shall be continuously monitored. The monitoring devices shall be electrically independent of the accelerator control and interlock systems and capable of providing a remote and local readout with visual and/or audible alarms at both the control panel and at entrance to high radiation areas, and other appropriate locations, so that people entering or present become aware of the existence of the hazard.
- (4) All area monitors shall be calibrated at intervals not to exceed six months, and after each servicing and repair. Records of calibration shall be maintained by the facility for a minimum of two years.
- (5) Whenever applicable, periodic surveys shall be made to determine the amount of airborne particulate radioactivity present in areas of airborne hazards.
- (6) Whenever applicable, periodic smear surveys shall be made to determine the degree of contamination in target and other pertinent areas.
- (7) All area surveys shall be made in accordance with the written procedures established by a qualified expert, or the radiation safety officer of the particle accelerator facility.
- (8) Records of all radiation protection surveys, calibration results, instrumentation tests, and smear results shall be kept current and on file at each accelerator facility.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–229–100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–44–110, filed 12/8/80; Order 1084, § 402–44–110, filed 1/14/76.]

WAC 246-229-110 Ventilation systems. (1) Means shall be provided to ensure that personnel are not exposed to airborne radioactive materials in excess of those limits specified in WAC 402-24-030, for restricted areas and WAC 402-24-050, for unrestricted areas.

(2) A registrant as required by WAC 402–24–050 shall not vent, release or otherwise discharge airborne radioactive material to an uncontrolled area which exceeds the limits specified in WAC 402–80–050 or 402–24–220 Appendix A – Table II, except as authorized pursuant to WAC 402–24–135 or 402–24–050(2). For purposes of this paragraph, concentrations may be averaged over a period not greater than one year. Every reasonable effort should be made to maintain releases of radioactive material to uncontrolled areas, as far below these limits as practicable.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–229–110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–44–120, filed 12/11/86. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–44–120, filed 12/8/80; Order 1084, § 402–44–120, filed 1/14/76.]

Chapter 246-232 WAC RADIOACTIVE MATERIAL--LICENSING APPLICABILITY

WAC	
246-232-001	Purpose and scope.
246-232-010	Exemptions.
246-232-020	Types of licenses.
246-232-030	Prelicensing inspection.
246-232-040	Reciprocal recognition of licenses.
246-232-050	Terms and conditions of licenses.
246-232-060	Termination of licenses.
246-232-070	Modification and revocation of licenses.
246-232-080	Transfer of material.
246-232-090	Transportation.
246–232–100	Requirements for users of the Washington commer cial low-level waste disposal site.
246-232-110	Large volumes of naturally occurring material.
246-232-120	Schedule B, exempt quantities of radioactive materials.
246-232-130	Schedule C, exempt concentrations.
246-232-140	Schedule D.
246-232-990	Fees.

- WAC 246-232-001 Purpose and scope. (1) This chapter prescribes rules governing licensing of radioactive material. No person shall receive, possess, use, transfer, own or acquire radioactive material except as authorized in a specific or general license issued pursuant to chapters 402-21 or 402-22 WAC or as otherwise provided in this chapter.
- (2) In addition to the requirements of this chapter, or chapters 402–21 or 402–22 WAC, all licensees are subject to the requirements of chapters 402–10, 402–12, 402–24, and 402–48 WAC. Licensees engaged in the practice of nuclear medicine are subject to the requirements of chapter 402–34 WAC, licensees engaged in industrial radiographic operations are subject to the requirements of chapter 402–36 WAC, licensees using sealed sources in the healing arts are subject to the requirements of chapter 402–32 WAC, and licensees owning or operating uranium or thorium mills and associated mill tailings are subject to the requirements of chapters 402–52 and 402–70 WAC.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–232–001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–19–010, filed 9/16/83; 79–12–073 (Order 1459), § 402–19–010, filed 11/30/79, effective 1/1/80. Formerly chapter 402–20 WAC.]

WAC 246-232-010 Exemptions. (1) Source material.

- (a) Any person is exempt from this chapter and chapters 402–21 and 402–22 WAC to the extent that such person receives, possesses, uses, owns, or transfers source material in any chemical mixture, compound, solution or alloy in which the source material is by weight less than 1/20 of one percent (0.05 percent) of the mixture, compound, solution, or alloy.
- (b) Any person is exempt from this chapter and chapters 402-21 and 402-22 WAC to the extent that such person receives, possesses, uses or transfers unrefined and unprocessed ore containing source material: *Provided*, That, except as authorized in a specific license, such person shall not refine or process such ore.

- (c) Any person is exempt from this chapter and chapters 402-21 and 402-22 WAC to the extent that such person receives, possesses, uses or transfers:
 - (i) Any quantities of thorium contained in:
 - (A) Incandescent gas mantles;
 - (B) Vacuum tubes;
 - (C) Welding rods;
- (D) Electric lamps for illuminating purposes provided that each lamp does not contain more than fifty milligrams of thorium;
- (E) Germicidal lamps, sunlamps and lamps for outdoor or industrial lighting provided that each lamp does not contain more than two grams of thorium;
- (F) Rare earth metals and compounds, mixtures, and products containing not more than 0.25 percent by weight thorium, uranium, or any combination of these; or
- (G) Personnel neutron dosimeters, provided each dosimeter does not contain more than 50 milligrams of thorium;
- (ii) Source material contained in the following products:
- (A) Glazed ceramic tableware: *Provided*, That the glaze contains not more than twenty percent by weight source material; and
- (B) Piezoelectric ceramic containing not more than two percent by weight source material;
- (iii) Photographic film, negatives and prints containing uranium or thorium;
- (iv) Any finished product or part fabricated of, or containing, tungsten—thorium or magnesium—thorium alloys: *Provided*, That the thorium content of the alloy does not exceed four percent by weight and that the exemption contained in this subparagraph shall not be deemed to authorize the chemical, physical or metallurgical treatment or processing of any such product or part;
- (v) Depleted uranium contained in counterweights installed in aircraft, rockets, projectiles and missiles, or stored or handled in connection with installation or removal of such counterweights, provided that:
- (A) The counterweights are manufactured in accordance with a specific license issued by the United States Nuclear Regulatory Commission authorizing distribution by the licensee pursuant to 10 CFR Part 40;
- (B) Each counterweight has been impressed with the following legend clearly legible through any plating or other covering: "DEPLETED URANIUM"*;
- (C) Each counterweight is durably and legibly labeled or marked with the identification of the manufacturer and the statement: "UNAUTHORIZED ALTERATIONS PROHIBITED"*; and
- (D) The exemption contained in this subparagraph shall not be deemed to authorize the chemical, physical or metallurgical treatment or processing of any such counterweight other than repair or restoration of any plating or other covering;

*Note: The requirements specified in WAC 402-19-190 (1)(c)(v)(B) and (C) need not be met by counterweights manufactured prior to December 31, 1969: Provided, That

such counterweights are impressed with the legend, "CAUTION - RADIOACTIVE MATERIAL - URANIUM," as previously required by the regulations.

- (vi) Depleted uranium used as shielding constituting part of any shipping container which is conspicuously and legibly impressed with the legend "CAUTION RADIOACTIVE SHIELDING URANIUM" and the uranium metal is encased in mild steel or in an equally fire resistant metal of a minimum wall thickness of 3.2 millimeters.
- (vii) Thorium contained in finished optical lenses: *Provided*, That each lens does not contain more than thirty percent by weight of thorium, and that the exemption contained in this subparagraph shall not be deemed to authorize either:
- (A) The shaping, grinding or polishing of such lens or manufacturing processes other than the assembly of such lens into optical systems and devices without alteration of the lens; or
- (B) The receipt, possession, use or transfer of thorium contained in contact lenses, or in spectacles, or in eyepieces in binoculars or other optical instruments;
- (viii) Uranium contained in detector heads for use in fire detection units: *Provided*, That each detector head contains not more than 0.005 microcuries of uranium; or
- (ix) Thorium contained in any finished aircraft engine part containing nickel-thoria alloy, provided that:
- (A) The thorium is dispersed in the nickel-thoria alloy in the form of finely divided thoria (thorium dioxide); and
- (B) The thorium content in the nickel-thoria alloy does not exceed four percent by weight.
- (d) The exemptions in WAC 402-19-190 (1)(c) do not authorize the manufacture of any of the products described.
 - (2) Radioactive material other than source material.
 - (a) Exempt concentrations.
- (i) Except as provided in WAC 402-19-190 (2)(a)(ii) any person is exempt from this chapter and chapters 402-21 and 402-22 WAC to the extent that such person receives, possesses, uses, transfers, owns or acquires products or materials containing radioactive material in concentrations not in excess of those listed in WAC 402-19-580, Schedule C.
- (ii) No person may introduce radioactive material into a product or material, knowing or having reason to believe, that it will be transferred to persons exempt under WAC 402-19-190 (2)(a)(i) or equivalent regulations of the United States Nuclear Regulatory Commission, any agreement state or licensing state, except in accordance with a specific license issued pursuant to WAC 402-22-110(1) or the general license provided in WAC 402-19-250.
 - (b) Exempt quantities.
- (i) Except as provided in WAC 402-19-190 (2)(b)(ii) and (iii) any person is exempt from these regulations to the extent that such person receives, possesses, uses, transfers, owns or acquires radioactive material in individual quantities each of which does not exceed the applicable quantity set forth in WAC 402-19-550, Schedule B.

- (ii) This paragraph, WAC 402-19-190 (2)(b), does not authorize the production, packaging or repackaging of radioactive material for purposes of commercial distribution, or the incorporation of radioactive material into products intended for commercial distribution.
- (iii) No person may, for purposes of commercial distribution, transfer radioactive material in the individual quantities set forth in WAC 402-19-550, Schedule B, knowing or having reason to believe that such quantities of radioactive material will be transferred to persons exempt under WAC 402-19-190 (2)(b) or equivalent regulations of the United States Nuclear Regulatory Commission or any agreement state or licensing state, except in accordance with a specific license issued by the United States Nuclear Regulatory Commission, pursuant to Section 32.18 of 10 CFR Part 32 or by the department pursuant to WAC 402-22-110(2) which license states that the radioactive material may be transferred by the licensee to persons exempt under WAC 402-19-190 (2)(b) or the equivalent regulations of the United States Nuclear Regulatory Commission or any agreement state or licensing state.
 - (c) Exempt items.
- (i) Certain items containing radioactive material. Except for persons who apply radioactive material to, or persons who incorporate radioactive material into the following products, any person is exempt from these regulations to the extent that person receives, possesses, uses, transfers, owns or acquires the following products:*
- *Note: Authority to transfer possession or control by the manufacturer, processor, or producer of any equipment, device, commodity, or other product containing source material or byproduct material whose subsequent possession, use, transfer and disposal by all other persons who are exempted from regulatory requirements may be obtained only from the United States Nuclear Regulatory Commission, Washington, D.C. 20555.
- (A) Timepieces or hands or dials containing not more than the following specified quantities of radioactive material and not exceeding the following specified levels of radiation:
 - 25 millicuries of tritium per timepiece;
 - 5 millicuries of tritium per hand;
 - 15 millicuries of tritium per dial (bezels when used shall be considered as part of the dial);
 - 100 microcuries of promethium 147 per watch or 200 microcuries of promethium 147 per any other timepiece;
 - 20 microcuries of promethium 147 per watch hand or 40 microcuries of promethium – 147 per other timepiece hand;
 - 60 microcuries of promethium 147 per watch dial or 120 microcuries of promethium – 147 per other timepiece dial (bezels when used shall be considered as part of the dial);
 - The levels of radiation from hands and dials containing promethium 147 will not exceed, when measured through 50 milligrams per square centimeter of absorber:
 - For wrist watches, 0.1 millirad per hour at 1 centimeter from any surface;

For pocket watches, 0.1 millirad per hour at 1 centimeter from any surface;

For any other timepiece, 0.2 millirad per hour at 10 centimeters from any surface.

One microcurie of radium-226 per timepiece in timepieces manufactured prior to the effective date of these regulations.

- (B) Lock illuminators containing not more than 15 millicuries of tritium or not more than 2 millicuries of promethium 147 installed in automobile locks. The levels of radiation from each lock illuminator containing promethium 147 will not exceed 1 millirad per hour at 1 centimeter from any surface when measured through 50 milligrams per square centimeter of absorber.
- (C) Precision balances containing not more than 1 millicurie of tritium per balance or not more than 0.5 millicurie of tritium per balance part.
- (D) Automobile shift quadrants containing not more than 25 millicuries of tritium.
- (E) Marine compasses containing not more than 750 millicuries of tritium gas and other marine navigational instruments containing not more than 250 millicuries of tritium gas.
- (F) Thermostat dials and pointers containing not more than 25 millicuries of tritium per thermostat.
- (G) Electron tubes: *Provided*, That each tube does not contain more than one of the following specified quantities of radioactive material:
- (aa) 150 millicuries of tritium per microwave receiver protector tube or 10 millicuries of tritium per any other electron tube;
 - (bb) 1 microcurie of cobalt-60;
 - (cc) 5 microcuries of nickel-63;
 - (dd) 30 microcuries of krypton-85;
 - (ee) 5 microcuries of cesium-137;
 - (ff) 30 microcuries of promethium-147;
 - (gg) 1 microcurie of radium-226:

And provided further, That the levels of radiation from each electron tube containing radioactive material does not exceed 1 millirad per hour at 1 centimeter from any surface when measured through 7 milligrams per square centimeter of absorber.*

- *Note: For purposes of this subdivision, "electron tubes" include spark gap tubes, power tubes, gas tubes including glow lamps, receiving tubes, microwave tubes, indicator tubes, pick-up tubes, radiation detection tubes, and any other completely sealed tube that is designed to conduct or control electrical currents.
- (H) Ionizing radiation measuring instruments containing, for purposes of internal calibration or standardization, a source of radioactive material not exceeding 0.05 microcuries of americium—241 or the applicable quantity set forth in WAC 402–19–550, Schedule B.
- (I) Spark gap irradiators containing not more than 1 microcurie of cobalt-60 per spark gap irradiator for use in electrically ignited fuel oil burners having a firing rate of at least three gallons (11.4 liters) per hour.
- (ii) Self-luminous products containing radioactive material(s).
- (A) Tritium, krypton-85 or promethium-147. Except for persons who manufacture, process or produce self-

luminous products containing tritium, krypton-85 or promethium-147, any person is exempt from these regulations to the extent that such person receives, possesses, uses, transfers, owns or acquires tritium, krypton-85 or promethium-147 in self-luminous products manufactured, processed, produced, imported or transferred in accordance with a specific license issued by the United States Nuclear Regulatory Commission pursuant to Section 32.22 of 10 CFR Part 32, which license authorizes the transfer of the product to persons who are exempt from regulatory requirements. The exemption in WAC 402-19-190 (2)(c)(ii) does not apply to tritium, krypton-85 or promethium-147 used in products for frivolous purposes or in toys or adornments.

- (B) Radium-226. Any person is exempt from these regulations to the extent that such person receives, possesses, uses, transfers or owns articles containing less than 0.1 microcurie of radium-226 which were manufactured prior to October 1983.
- (iii) Gas and aerosol detectors containing radioactive material.
- (A) Except for persons who manufacture, process or produce gas and aerosol detectors containing radioactive material, any person is exempt from these regulations to the extent that such person receives, possesses, uses, transfers, owns or acquires radioactive material in gas and aerosol detectors designed to protect life or property from fires and airborne hazards: *Provided*, That detectors containing radioactive material shall have been manufactured, imported, or transferred in accordance with a specific license issued by the United States Nuclear Regulatory Commission* or an agreement state, pursuant to Section 32.26 of 10 CFR Part 32, or licensing state pursuant to WAC 402–22–110(3), which authorizes the transfer of the detectors to persons who are exempt from regulatory requirements.

*Note: Authority to transfer possession or control by the manufacturer, processor, or producer of any equipment, device, commodity, or other product containing source material or byproduct material whose subsequent possession, use, transfer and disposal by all other persons are exempted from regulatory requirements may be obtained only from the United States Nuclear Regulatory Commission, Washington, D.C. 20555

- (B) Gas and aerosol detectors previously manufactured and distributed to general licensees in accordance with a specific license issued by an agreement state shall be considered exempt under WAC 402–19–190 (2)(c)(iii)(A): Provided, That the device is labeled in accordance with the specific license authorizing distribution of the general licensed device: And provided further, That they meet the requirements of WAC 402–22–110(3).
- (C) Gas and aerosol detectors containing naturally occurring and accelerator-produced radioactive material (NARM) previously manufactured and distributed in accordance with a specific license issued by a licensing state shall be considered exempt under WAC 402-19-190 (2)(c)(iii)(A): Provided, That the device is labeled in accordance with the specific license authorizing distribution of the generally licensed device, and provided

further that they meet the requirements of WAC 402-22-110(3).

(iv) Resins containing scandium-46 and designed for sand consolidation in oil wells. Any person is exempt from these regulations to the extent that such person receives, possesses, uses, transfers, owns or acquires synthetic plastic resins containing scandium-46 which are designed for sand consolidation in oil wells. Such resins shall have been manufactured or imported in accordance with a specific license issued by the United States Nuclear Regulatory Commission or shall have been manufactured in accordance with the specifications contained in a specific license issued by the department or any agreement state to the manufacturer of such resins pursuant to licensing requirements equivalent to those in Sections 32.16 and 32.17 of 10 CFR Part 32 of the regulations of the United States Nuclear Regulatory Commission. This exemption does not authorize the manufacture of any resins containing scandium-46.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–232–010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–19–190, filed 12/11/86; 83–19–050 (Order 2026), § 402–19–190, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–19–190, filed 12/8/80. Statutory Authority: RCW 70.98.080. 79–12–073 (Order 1459), § 402–19–190, filed 11/30/79, effective 1/1/80. Formerly WAC 402–20–190.]

WAC 246-232-020 Types of licenses. Licenses for radioactive materials are of two types: General and specific.

- (1) General licenses provided in chapter 402–21 WAC are effective without the filing of applications with the department or the issuance of licensing documents to the particular persons, although the filing of a certificate with the department may be required by the particular general license. The general licensee is subject to all other applicable portions of these regulations and any limitations of the general license.
- (2) Specific licenses require the submission of an application to the department and the issuance of a licensing document by the department. The licensee is subject to all applicable portions of these regulations as well as any limitations specified in the licensing document. (See chapter 402–22 WAC.)

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-232-020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 79-12-073 (Order 1459), § 402-19-220, filed 11/30/79, effective 1/1/80. Formerly WAC 402-20-020.]

WAC 246-232-030 Prelicensing inspection. The department may verify information contained in applications and secure additional information deemed necessary to make a reasonable determination as to whether to issue a license and whether any special conditions should be attached thereto by visiting the facility or location where radioactive materials would be possessed or used, and by discussing details of the proposed possession or use of the radioactive materials with the applicant or representatives designated by the applicant. Such visits may be made by the department or its duly authorized representatives.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–232–030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 79–12–073 (Order 1459), § 402–19–240, filed 11/30/79, effective 1/1/80. Formerly WAC 402–20–200.]

WAC 246-232-040 Reciprocal recognition of licenses. (1) Subject to these regulations, any person who holds a specific license from the United States Nuclear Regulatory Commission or any agreement state or licensing state, and issued by the agency having jurisdiction where the licensee maintains an office for directing the licensed activity and at which radiation safety records are normally maintained, is hereby granted a general license to conduct the activities authorized in such licensing document within this state for a period not in excess of one hundred eighty days in that twelve month period which commences the date approval is granted, and the appropriate fee received, by the department provided that:

- (a) The licensing document does not limit the activity authorized by such document to specified installations or locations;
- (b) The out-of-state licensee notifies the department in writing and pays or has paid the appropriate fee (refer to WAC 440-44-057(3)), at least three days prior to each entry to the state to engage in such activity. The written notification must be sent to the Office of Radiation Protection, Department of Social and Health Services, Mailstop LE-13, Olympia, Washington 98504 and the fee should be sent to Washington State Department of Social and Health Services; Division of Health; Office of Radiation Protection, LE-13, Olympia, Washington 98504. Such notification shall indicate the location, period, and type of proposed possession and use within the state, and shall be accompanied by copies of the pertinent licensing document and operations/procedures manual. If, for a specific case, the three-day period would impose an undue hardship on the out-of-state licensee, the licensee may, upon telephone application to the department (206-753-3351), obtain permission to proceed sooner. The department may waive the requirement for filing additional written notifications during the remainder of the twelve months following the receipt of the initial notification from a person engaging in activities under the general license provided in this subsection;
- (c) The out-of-state licensee complies with all applicable regulations of the department and with all the terms and conditions of the licensing document, except any such terms and conditions which may be inconsistent with applicable regulations of the department;
- (d) The out-of-state licensee supplies such other information as the department may request; and
- (e) The out-of-state licensee shall not transfer or dispose of radioactive material possessed or used under the general license provided in this subsection except by transfer to a person:
- (i) Specifically licensed by the department or by the United States Nuclear Regulatory Commission, an agreement state or a licensing state to receive such material; or

- (ii) Exempt from the requirements for a license for such material under WAC 402-19-190 (2)(a).
- (2) Notwithstanding the provisions of subsection (1) of this section, any person who holds a specific license issued by the United States Nuclear Regulatory Commission, an agreement state or a licensing state authorizing the holder to manufacture, transfer, install, or service a device described in WAC 402-21-050(4) within the areas subject to the jurisdiction of the licensing body is hereby granted a general license to install, transfer, demonstrate or service a device in this state provided that:
- (a) Such person shall file a report with the department within thirty days after the end of each calendar quarter in which any device is transferred to or installed in this state. Each such report shall identify each general licensee to whom such device is transferred by name and address, the type of device transferred, and the quantity and type of radioactive material contained in the device;
- (b) The device has been manufactured, labeled, installed, and serviced in accordance with applicable provisions of the specific license issued to such person by the United States Nuclear Regulatory Commission, an agreement state or a licensing state;
- (c) Such person shall assure that any labels required to be affixed to the device under regulations of the authority which licensed manufacture of the device bear a statement that "Removal of this label is prohibited"; and
- (d) The holder of the specific license shall furnish to each general licensee to whom such device is transferred or on whose premises such device is installed a copy of the general license contained in WAC 402-21-050(4).
- (3) The department may withdraw, limit, or qualify its acceptance of any specific license or equivalent licensing document issued by another agency, or any product distributed pursuant to such licensing document, upon determining that such action is necessary in order to prevent undue hazard to public health and safety or property.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–232–040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–19–250, filed 12/11/86; 83–19–050 (Order 2026), § 402–19–250, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–19–250, filed 12/8/80. Statutory Authority: RCW 70.98.080. 79–12–073 (Order 1459), § 402–19–250, filed 11/30/79, effective 1/1/80. Formerly WAC 402–20–210.]

WAC 246-232-050 Terms and conditions of licenses. (1) Each license issued pursuant to this part shall be subject to all the provisions of the act, as now or hereafter in effect, and to all rules, regulations, and orders of the department.

(2) No license issued or granted under chapters 402–21 and 402–22 WAC and no right to possess or utilize radioactive material granted by any license issued pursuant to chapters 402–21 and 402–22 WAC shall be transferred, assigned, or in any manner disposed, either voluntarily or involuntarily, directly or indirectly, through transfer of control of any license to any person

- unless the department shall, after securing full information find that the transfer is in accordance with the provisions of the act, and shall give its consent in writing.
- (3) Each person licensed by the department pursuant to chapters 402–21 and 402–22 WAC shall confine use and possession of the material licensed to the locations and purposes authorized by the license.
- (4) Approval of licensee's procedures by the department does not release the licensee from responsibility if adherence to these procedures results in undue exposure to individuals or loss of control of radioactive material.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–232–050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–19–300, filed 12/11/86; 83–19–050 (Order 2026), § 402–19–300, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–19–300, filed 12/8/80. Statutory Authority: RCW 70.98.080. 79–12–073 (Order 1459), § 402–19–300, filed 11/30/79, effective 1/1/80.]

- WAC 246-232-060 Termination of licenses. (1) Each specific licensee shall immediately notify the department in writing when the licensee decides to permanently discontinue all activities involving materials authorized under the license and request termination of the license. This notification and request for termination of the license must include the reports and information specified in subsection (3) (c) and (d) of this section. The licensee is subject to the provisions of subsections (3) and (4) of this section, as applicable.
- (2) No less than thirty days before the expiration date specified in a specific license, the licensee shall either:
- (a) Submit an application for license renewal under WAC 402-22-055; or
- (b) Notify the department in writing if the licensee decides not to renew the license.
- (3) If a licensee does not submit an application for license renewal under WAC 402-22-055, the licensee shall on or before the expiration date specified in the license:
 - (a) Terminate use of byproduct material;
 - (b) Properly dispose of byproduct material;
- (c) Submit a completed departmental form "Certificate of disposition of radioactive material"; and
- (d) Submit a radiation survey report to confirm the absence of radioactive materials or establish the levels of radioactive contamination, unless the department determines a radiation survey report is not necessary.
- (i) If no radioactive contamination attributable to activities conducted under the license is detected, the licensee shall submit a certification that no detectable radioactive contamination was found. If the information submitted under this paragraph and subsection (3) (c) and (d) of this section is adequate, the department will notify the licensee in writing that the license is terminated.
- (ii) If detectable levels of radioactive contamination attributable to activities conducted under the license are found, the license continues in effect beyond the expiration date, if necessary, with respect to possession of residual radioactive material present as contamination until the department notifies the licensee in writing that

the license is terminated. During this time, the licensee is subject to the provisions of subsection (4) of this section. In addition to the information submitted under subsection (3)(c) and (d) of this section, the licensee shall submit a plan for decontamination, if necessary.

- (4) Each licensee who possesses residual byproduct material under subsection (3)(d)(ii) of this section, following the expiration of the facility and/or equipment date specified in the license, shall:
- (a) Be limited to actions, involving radioactive material related to decontamination and preparation for release for unrestricted use; and
- (b) Continue to control entry to restricted areas until they are suitable for release for unrestricted use and the department notifies the licensee in writing that the license is terminated. The guidance contained in WAC 402-19-590, Schedule D, shall be used in making this determination.
- (5) Each general licensee licensed under the provisions of WAC 402-21-050(8), shall immediately notify the department in writing when the licensee decides to discontinue all activities involving radioactive materials authorized under the general license. Such notification shall include a description of how the generally licensed material was disposed and the results of facility surveys, if applicable, to confirm the absence of radioactive materials.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–232–060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–19–330, filed 9/16/83.]

WAC 246-232-070 Modification and revocation of licenses. (1) The terms and conditions of all licenses shall be subject to amendment, revision, or modification, or the license may be suspended or revoked by reason of amendments to the act, or by reason of rules, regulations, and orders issued by the department.

- (2) Any license may be revoked, suspended, or modified, in whole or in part, for any material false statement in the application or any statement of fact required under provisions of the act, or because of conditions revealed by such application or statement of fact or any report, record, or inspection or other means which would warrant the department to refuse to grant a license on an original application, or for violation of, or failure to observe any of the terms and conditions of the act, or of the license, or of any rule, regulation, or order of the department.
- (3) Except in cases of willful disregard for the regulations or applicable license conditions or those in which the public health, interest, or safety requires otherwise, no license shall be modified, suspended, or revoked unless, prior to the institution of proceedings therefore, facts or conduct which may warrant such action shall have been called to the attention of the licensee in writing and the licensee shall have been accorded an opportunity to demonstrate or achieve compliance with all lawful requirements.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-232-070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-19-

350, filed 12/11/86; 83–19–050 (Order 2026), § 402–19–350, filed 9/16/83; 79–12–073 (Order 1459), § 402–19–350, filed 11/30/79, effective 1/1/80. Formerly WAC 402–20–180.]

WAC 246-232-080 Transfer of material. (1) No licensee shall transfer radioactive material except as authorized pursuant to this section.

- (2) Except as otherwise provided in the license and subject to the provisions of this section, any licensee may transfer radioactive material:
- (a) To the department. A licensee may transfer material to the department only after receiving prior approval from the department;
 - (b) To the United States Department of Energy;
- (c) To any person exempt from the regulations in this part to the extent permitted under such exemption;
- (d) To any person authorized to receive such material under terms of a general license or its equivalent, or a specific license or equivalent licensing document, issued by the department, the United States Nuclear Regulatory Commission, any agreement state or any licensing state, or to any person otherwise authorized to receive such material by the federal government or any agency thereof, the department, any agreement state or any licensing state; or
- (e) As otherwise authorized by the department in writing.
- (3) Before transferring radioactive material to a specific licensee of the department, the United States Nuclear Regulatory Commission, an agreement state or a licensing state, or to a general licensee who is required to register with the department, the United States Nuclear Regulatory Commission, an agreement state or a licensing state prior to receipt of the radioactive material, the licensee transferring the material shall verify that the transferee's license authorizes the receipt of the type, form, and quantity of radioactive material to be transferred.
- (4) The following methods for the verification required by WAC 402-19-400(3) are acceptable:
- (a) The transferor may obtain for possession, and read, a current copy of the transferee's specific license or registration certificate;
- (b) The transferor may obtain for possession a written certification from the transferee that the transferee is authorized by license or registration certificate to receive the type, form, and quantity of radioactive material to be transferred, specifying the license or registration certificate number, issuing agency, and expiration date;
- (c) For emergency shipments the transferor may accept oral certification by the transferee that the transferee is authorized by license or registration certificate to receive the type, form, and quantity of radioactive material to be transferred, specifying the license or registration certificate number, issuing agency, and expiration date: *Provided*, That the oral certification is confirmed in writing within ten days;
- (d) The transferor may obtain other sources of information compiled by a reporting service from official records of the department, the United States Nuclear Regulatory Commission, the licensing agency of an agreement state or a licensing state as to the identity of

licensees and the scope and expiration dates of licenses and registration; or

- (e) When none of the methods of verification described in subsection (4) of this section are readily available or when a transferor desires to verify that information received by one of such methods is correct or up-to-date, the transferor may obtain and record confirmation from the department, the United States Nuclear Regulatory Commission, or the licensing agency of an agreement state or a licensing state that the transferee is licensed to receive the radioactive material.
- (5) Preparation for shipment and transport of radioactive material shall be in accordance with the provisions of WAC 402-19-500.
- (6) The requirements of WAC 402-19-400(4) notwithstanding, no verification is required when returning used, unused or decayed sources of radiation to the original manufacturer, (e.g., industrial radiography sources, teletherapy sources, portable moisture/density gauge sources, fixed gauge sources, and Mo-99/Tc-99m generators).

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–232–080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–19–400, filed 12/11/86. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–19–400, filed 12/8/80. Statutory Authority: RCW 70.98.080. 79–12–073 (Order 1459), § 402–19–400, filed 11/30/79, effective 1/1/80. Formerly WAC 402–20–170.]

- WAC 246-232-090 Transportation. (1) Transportation of radioactive material. No person shall deliver radioactive material to a carrier for transport or transport radioactive material except as authorized in a general or specific license issued by the department or as exempted in WAC 402-19-500(2).
 - (2) Exemptions.
- (a) Common and contract carriers, freight forwarders, and warehousemen who are subject to the rules and regulations of the United States Department of Transportation (49 CFR Parts 170 through 189) or the United States Postal Service (Domestic Mail Manual, Section 124.3 incorporated by reference, 39 CFR 111.11 (1974)) are exempt from WAC 402–19–500 to the extent that they transport or store radioactive material in the regular course of their carriage for another or storage incident thereto. Common and contract carriers who are not subject to the rules and regulations of the United States Department of Transportation or United States Postal Service are subject to WAC 402–19–500(1) and other applicable sections of these regulations.
- (b) Physicians, as defined in WAC 402-12-050, are exempt from the requirements of WAC 402-19-500 only to the extent that they transport radioactive material for emergency use in the practice of medicine.
- (c) Specific licensees are exempt from WAC 402-19-500 to the extent that they deliver to a carrier for transport packages each of which contains no radioactive material having a specific activity in excess of 0.002 microcurie per gram.
- (d) Any licensee who delivers radioactive material to a carrier for transport, where such transport is subject to

- the regulations of the United States Postal Service, is exempt from the provisions of WAC 402-19-500(1).
 - (3) General licenses for carriers.
- (a) A general license is hereby issued to any common or contract carrier not exempted under WAC 402-19-500(2) to receive, possess, transport and store radioactive material in the regular course of their carriage for another or storage incident thereto, provided the transportation and storage is in accordance with the applicable requirements of the regulations, appropriate to the mode of transport, of the United States Department of Transportation.
- (b) A general license is hereby issued to any private carrier to transport radioactive material, provided the transportation is in accordance with the applicable requirements of the regulations, appropriate to the mode of transport, of the United States Department of Transportation insofar as such regulations relate to the loading and storage of packages, placarding of the transporting vehicle, shipping papers, and incident reporting.¹
- (c) Persons who transport radioactive material pursuant to the general licenses in WAC 402-19-500 (3)(a) or (b) are exempt from the requirements of chapters 402-24 and 402-48 WAC of these regulations to the extent that they transport radioactive material.
- (4) Preparation of radioactive material for transport. A general license is hereby issued to deliver radioactive material to a carrier² for transport provided that:
- (a) The licensee complies with the applicable requirements of the regulations, appropriate to the mode of transport, of the United States Department of Transportation insofar as such regulations relate to the packaging of radioactive material, to shipping papers, and to the monitoring, marking and labeling of those packages.
- (b) The licensee has established procedures for opening and closing packages in which radioactive material is transported to provide safety and to assure that, prior to the delivery to a carrier for transport, each package is properly closed for transport.
- (c) Prior to delivery of a package to a carrier for transport, the licensee shall assure that any special instructions needed to safely open the package are sent to or have been make available to the consignee.
- (d) In addition to the requirements of the United States Department of Transportation, each package of Type A or Type B quantity radioactive material prepared for shipment must have the innermost container labeled as to the isotope, chemical form, number of curies or subunits thereof, and date of determination of activity and each innermost container shall be tested to assure that the container is properly sealed and that contamination which would cause undue hazard to public health and safety or property is not present prior to transportation. This requirement does not apply to properly packaged shipments of radioactive waste consigned to a commercial low level waste burial facility.
- (5) Transport of nuclear waste—Advance notification requirement. Prior to the transport of any nuclear waste outside of the confines of the licensee's plant or other place of use or storage, or prior to the delivery of any

nuclear waste to a carrier for transport, each licensee shall comply with the procedures in this subsection for advance notification to the governor of a state or the governor's designee for the transport of nuclear waste to, through, or across the boundary of the state.

- (a) Where, when, and how advance notification must be sent. The notification required by WAC 402-19-500(5) must be made in writing to the office of each appropriate governor or governor's designee and to the director of the appropriate Nuclear Regulatory Commission Regional Office. A notification delivered by mail must be postmarked at least seven days before the beginning of the seven-day period during which departure of the shipment is estimated to occur. A notification delivered by messenger must reach the office of the governor or of the governor's designee at least four days before the beginning of the seven-day period during which departure of the shipment is estimated to occur. A list of the mailing addresses of the governors and governors' designees is available upon request from the Director, Office of State Programs, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. A copy of the notification shall be retained by the licensee as a record for one year.
- (b) Information to be furnished in advance notification of shipment. Each advance notification of shipments of nuclear waste must contain the following information:
- (i) The name, address, and telephone number of the shipper, carrier, and receiver of the nuclear waste shipment;
- (ii) A description of the nuclear waste contained in the shipment as required by the regulations of the U.S. Department of Transportation in 49 CFR §§ 172.202 and 172.203(d);
- (iii) The point of origin of the shipment, and the seven-day period during which departure of the shipment is estimated to occur;
- (iv) The seven-day period during which arrival of the shipment at state boundaries is estimated to occur;
- (v) The destination of the shipment, and the sevenday period during which arrival of the shipment is estimated to occur; and
- (vi) A point of contact with a telephone number for current shipment information.
- (c) Revision notice. A licensee who finds that schedule information previously furnished to a governor or governor's designee in accordance with (a) and (b) of this subsection will not be met, shall telephone a responsible individual in the office of the governor of the state or of the governor's designee and inform that individual of the extent of the delay relative to the schedule originally reported in writing under the provisions of (a) and (b) of this subsection. The licensee shall maintain a record of the name of the individual contacted for one year.
- (d) Cancellation notice. Each licensee who cancels a nuclear waste shipment for which advance notification has been sent as required by this subsection shall send a cancellation notice to the governor of each state or the governor's designee previously notified and to the director of the appropriate Nuclear Regulatory Commission Inspection and Enforcement Regional Office. The notice

shall state that it is a cancellation and shall identify the advance notification which is being cancelled. A copy of the notice shall be retained by the licensee as a record for one year.

¹Any notification of incidents referred to in those requirements shall be filed with, or made to, the department.

²For the purpose of this regulation, licensees who transport their own licensed material as private carriers are considered to have delivered such material to a carrier for transport.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–232–090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–19–500, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–19–500, filed 12/8/80. Statutory Authority: RCW 70.98.080. 79–12–073 (Order 1459), § 402–19–500, filed 11/30/79, effective 1/1/80. Formerly WAC 402–20–220.]

WAC 246-232-100 Requirements for users of the Washington commercial low-level waste disposal site. (1) Purpose and scope. Each generator and each broker of low-level radioactive waste (LLRW) shall have a valid and unencumbered site use permit prior to shipment of such waste to, or disposal of such waste at, any commercial low-level radioactive waste burial site located in the state of Washington; and each generator and each broker of such waste shall prepare a low-level radioactive waste shipment certification prior to shipment of such waste to any commercial low-level radioactive waste burial site located in the state of Washington.

- (2) Definitions.
- (a) The term "generator" as used in these regulations shall mean the last person who puts radioactive material to practical use, and who then declares it to be no longer of use or value.
- (b) The term "broker" as used in these regulations shall mean a person who performs one or more of the following functions for a low-level radioactive waste generator:
- (i) Arranges for the transportation of the low-level radioactive waste:
- (ii) Collects and/or consolidates shipments of such low-level radioactive waste;
- (iii) Processes such low-level radioactive waste in some manner;

Provided it shall not mean a carrier whose sole function is to transport such low-level radioactive waste.

- (3) Site use permit.
- (a) Filing application for site use permit.
- (i) Application for a site use permit shall be filed on departmental form RHF-30 or a clear legible record containing all the information required on that form including but not limited to: United States Nuclear Regulatory Commission or agreement state license number, name of company, address, 24-hour telephone number, and contact person.
- (ii) Each application shall be signed by the applicant or a person duly authorized to act for or on the applicant's behalf.
- (b) A site use permit must be obtained before disposal of low-level radioactive waste at any waste burial site is permitted. A generator who provides broker services for waste generated at the generator's own facility shall not

be required to obtain a broker permit in addition to a generator permit.

- (c) Each permit shall be renewed annually.
- (d) Revocation of permit.
- (i) The failure of one or more packages in a shipment to be in compliance with the requirements of the license issued to the commercial low-level radioactive waste disposal site operator, Title 402 WAC, the United States Nuclear Regulatory Commission, or the United States Department of Transportation, may cause the revocation of this use permit for the responsible waste generator or broker. Failure to comply with the requirements in the preceding sentence may bar the acceptance of any other or subsequent shipment by the same generator or broker at the site.
- (ii) The site use permit may be revoked for a specific generator and/or broker if a refusal to accept one or more of the shipments has been made by any other licensed commercial low-level waste burial site within the United States.
- (iii) The site use permit may be reinstated provided the generator and/or broker submits documentation approved by the department describing its quality assurance program to achieve compliance for future shipments.
- (4) Waste shipment certification. A low-level radioactive waste shipment certification shall be required to accompany each shipment of radioactive waste to the licensed low-level waste burial site. The certification shall be submitted at the burial site to the department of social and health services or its designee; must bear original signatures of the generator, broker, and carrier; and must be judged to be properly executed prior to acceptance of the waste by the site operator. If a broker is acting as the packager of the waste, the broker may act as the agent of the generator and may sign the certification statement for the generator, provided the name and site use permit number of the original generator are identified. The certification shall be on departmental form RHF-31 or a clear legible record containing all the information required in that form. The information shall include, but is not limited to, name of company, volume of waste in the shipment, shipment number, permit number, date, and whether or not a broker is involved.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–232–100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080 and chapter 70.121 RCW. 86–17–027 (Order 2406), § 402–19–530, filed 8/13/86. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–19–530, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–19–530, filed 12/8/80. Statutory Authority: RCW 70.98.080. 80–02–080 (Order 1481), § 402–19–530, filed 1/21/80.]

WAC 246-232-110 Large volumes of naturally occurring material. (1) In addition to requirements for a disposal site use permit contained in WAC 402-19-530, permittees and single generators of radioactive wastes shall obtain the specific approval of the department prior to offering wastes for disposal which: (a) Contain naturally occurring radioactive material, excluding source material, (b) contain an average total concentration less

than, or equal to, 0.002 microcuries per gram, and (c) total in excess of 1,000 cubic feet per year.

- (2) Applications for specific departmental approval shall describe: (a) The chemical processes which produce or have produced the waste, (b) the volume of waste to be disposed per year, (c) an estimate of how long the permittee's disposal needs will continue, (d) actions which have been taken or are planned which could decrease the volume of the waste, and (e) alternative methods of disposal which have been considered by the permittee.
- (3) A request for specific approval may be approved if the department finds the material to be: (a) Consistent with disposal site volume utilization, (b) in conformance with conditions of all licenses and permits issued to the disposal site operator, (c) more appropriately disposed at Hanford than by alternative means consistent with the concepts contained in P.L. 99–240 Low Level Radioactive Waste Policy Amendments Act of 1985, and (d) consistent with protection of the public health, safety and environment.
- (4) Denial by the department of a request for specific approval shall not be interpreted as an approval to dispose of naturally occurring radioactive material without regard to its radioactivity.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-232-110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080 and chapter 70.121 RCW. 86-17-027 (Order 2406), § 402-19-540, filed 8/13/86.]

WAC 246-232-120 Schedule B, exempt quantities of radioactive materials. (See also WAC 402-19-190 (2)(b).)

Radioactive Material	Microcuries
Antimony–122 (Sb–122)	100
Antimony-124 (Sb-124)	10
Antimony-125 (Sb-125)	10
Arsenic-73 (As-73)	100
Arsenic-74 (As-74)	10
Arsenic-76 (As-76)	10
Arsenic-77 (As-77)	100
Barium-131 (Ba-131)	10
Barium-133 (Ba-133)	10
Barium-140 (Ba-140)	10
Bismuth-210 (Bi-210)	
Bromine-82 (Br-82)	10
Cadmium-109 (Cd-109)	10
Cadmium-115m (Cd-115m)	10
Cadmium-115 (Cd-115)	100
Calcium-45 (Ca-45)	10
Calcium-47 (Ca-47)	10
Carbon-14 (C-14)	100
Cerium-141 (Ce-141)	100
Cerium-143 (Ce-143)	100
Cerium-144 (Ce-144)	1
Cesium-129 (Cs-129)	100
Cesium-131 (Cs-131)	1,000
Cesium-134m (Cs-134m)	100
Cesium-134 (Cs-134)	1
Cesium-135 (Cs-135)	10

Radioactive Material	Microcuries	Radioactive Material	Microcuries	
Cesium-136 (Cs-136)	10	Neodymium-147 (Nd-147)	100	
Cesium-137 (Cs-137)	10	Neodymium-149 (Nd-149)	100	
Chlorine-36 (Cl-36)	10	Nickel-59 (Ni-59)	100	
Chlorine–38 (Cl–38)	10	Nickel-63 (Ni-63)	10	
Chromium-51 (Cr-51)	1,000	Nickel-65 (Ni-65)	100	
Cobalt-57 (Co-57)	100	Niobium-93m (Nb-93m)	10	
Cobalt-58m (Co-58m)	10	Niobium–95 (Nb–95)	10	
Cobalt-58 (Co-58)	10	Niobium-97 (Nb-97)	10	
Cobalt-60 (Co-60)	1	Osmium-185 (Os-185)	10	
Copper-64 (Cu-64)	100	Osmium-191m (Os-191m)	100	
Dysprosium-165 (Dy-165)	10	Osmium-191 (Os-191)	100	
Dysprosium–166 (Dy–166)	100	Osmium-193 (Os-193)	100	
Erbium–169 (Er–169)	100	Palladium-103 (Pd-103)	100	
Erbium-171 (Er-171)	100	Palladium-109 (Pd-109)	100	
Europium-152 (Eu-152) 9.2h	100	Phosphorus-32 (P-32)	10	
Europium-152 (Eu-152) 13 yr	1	Platinum-191 (Pt-191)	100	
Europium-154 (Eu-154)	1	Platinum-193m (Pt-193m)	100	
Europium-155 (Eu-155)	10	Platinum-193 (Pt-193)	100	
Fluorine-18 (F-18)	1,000	Platinum-197m (Pt-197m)	100	
Gadolinium-153 (Gd-153)	10	Platinum-197 (Pt-197)	100	
Gadolinium–159 (Gd–159)	100	Polonium-210 (Po-210)	0.1	
Gallium-67 (Ga-67)	100	Potassium-42 (K-42)	10	
Gallium-72 (Ga-72)	10	Potassium-43 (K-43)	10	
Germanium-71 (Ge-71)	100	Praseodymium-142 (Pr-142)	100	
Gold-198 (Au-198)	100	Praseodymium-143 (Pr-143)	100	
Gold-199 (Au-199)	100	Promethium-147 (Pm-147)	10	
Hafnium-181 (Hf-181)	10	Promethium-149 (Pm-149)	10	
Holmium–166 (Ho–166)	100	Radium-226 (Ra-226)	0.1 100	
Hydrogen-3 (H-3)	1,000 100	Rhenium-186 (Re-186)	100	
Indium-111 (In-111) Indium-113m (In-113m)	100	Rhenium-188 (Re-188) Rhodium-103m (Rh-103m)	100	
Indium-113m (III-113m) Indium-114m (In-114m)	100	Rhodium-105 (Rh-105)	100	
Indium-114m (In-114m) Indium-115m (In-115m)	100	Rubidium-81 (Rb-81)	10	
Indium-115 (In-115)	100	Rubidium-86 (Rb-86)	10	
Iodine-123 (I-123)	100	Rubidium-87 (Rb-87)	10	
Iodine–125 (I–125)	1	Ruthenium-97 (Ru-97)	100	
Iodine–126 (I–126)	î	Ruthenium-103 (Ru-103)	10	
Iodine–129 (I–129)	0.1	Ruthenium-105 (Ru-105)	10	
Iodine–131 (I–131)	1	Ruthenium-106 (Ru-106)	1	
Iodine–132 (I–132)	10	Samarium-151 (Sm-151)	10	
Iodine-133 (I-133)	1	Samarium-153 (Sm-153)	100	
Iodine–134 (I–134)	10	Scandium-46 (Sc-46)	10	
lodine–135 (I–135)	10	Scandium-47 (Sc-47)	100	
(Iridium–192` (Ir–192)	10	Scandium-48 (Sc-48)	10	
Iridium–194 (Ir–194)	100	Selenium-75 (Se-75)	10	
fron-52 (Fe-52)	10	Silicon-31 (Si-31)	100	
(ron-55 (Fe-55)	100	Silver-105 (Ag-105)	10	
Iron-59 (Fe-59)	10	Silver-110m (Ag-110m)	1	
Krypton–85 (Kr–85)	100	Silver-111 (Ag-111)	100	
Krypton–87 (Kr–87)	10	Sodium-22 (Na-22)	10	
Lanthanum-140 (La-140)	10	Sodium-24 (Na-24)	10	
Lutetium-177 (Lu-177)	100	Strontium-85 (Sr-85)	10	
Manganese-52 (Mn-52)	10	Strontium-89 (Sr-89)	1	
Manganese-54 (Mn-54)	10	Strontium-90 (Sr-90)	0.1	
Manganese-56 (Mn-56)	10	Strontium-91 (Sr-91)	10	
Mercury-197m (Hg-197m)	100	Strontium-92 (Sr-92)	10	
Mercury-197 (Hg-197)	100	Sulphur-35 (S-35)	100	
Mercury-203 (Hg-203)	10	Tantalum-182 (Ta-182)	10	
Molybdenum-99 (Mo-99)	100	Technetium-96 (Tc-96)	10	

Radioactive Material	Microcuries	WAC 246-232-130 Schedule C, exempt concentrations. (See WAC 402-19-190 (2)(a).)			
Technetium-97m (Tc-97m)	100			()())	0.1
Technetium-97 (Tc-97)	100				Column II Liquid
Technetium-99m (Tc-99m)	100			Column I	and
Technetium-99 (Tc-99)	10			Gas con-	solid
Tellurium-125m (Te-125m)	10	Element (atomic		centra-	concen-
Tellurium-127m (Te-127m)	10	number)	· .	tion	tration
Tellurium-127 (Te-127)	100		Isotope	μCi/ml¹	μCi/ml ²
Tellurium-129m (Te-129m)	10	Antimony (51)	Sb-122		$3x10^{-4}$
Tellurium-129 (Te-129)	100	(,	Sb-124		$2x10^{-4}$ $1x10^{-3}$
Tellurium-131m (Te-131m)	10		Sb-125	2	1×10^{-3}
Tellurium-132 (Te-132)	10	Argon (18)	Ar-37	1×10^{-3}	
Terbium-160 (Tb-160)	10	Arsenic (33)	Ar–41 As–73	$4x10^{-7}$	$5x10^{-3}$
Thallium-200 (Tl-200)	100	Aisenic (55)	As-74		$5x10^{-4}$
Thallium-201 (Tl-201)	100		As-76		$2x10^{-4}$
Thallium-201 (Tl-201) Thallium-202 (Tl-202)	100		As-77		$8x10^{-4}$
Thallium–202 (Tl–202) Thallium–204 (Tl–204)	100	Barium (56)	Ba-131		$2x10^{-3}$
	10	D 11' (4)	Ba-140		$3x10^{-4}$ $2x10^{-2}$
Thulium-170 (Tm-170)		Beryllium (4) Bismuth (83)	Be-7 Bi-206		$4x10^{-4}$
Thulium-171 (Tm-171)	10	Bromine (35)	Br-82	$4x10^{-7}$	$3x10^{-3}$
Tin-113 (Sn-113)	10	Cadmium (48)	Cd-109		2x10 ⁻³
Tin-125 (Sn-125)	10		Cd-115m		$3x10^{-4}$
Tungsten-181 (W-181)	10	0.11 (***)	Cd-115		$3x10^{-4}$
Tungsten-185 (W-185)	10	Calcium (20)	Ca–45 Ca–47		$9x10^{-5}$ $5x10^{-4}$
Tungsten-187 (W-187)	100	Carbon (6)	Ca-47 C-14	1×10^{-6}	8×10^{-3}
Vanadium-48 (V-48)	10	Cerium (58)	Ce-141	IXIO	9×10^{-4}
Xenon-131m (Xe-131m)	1,000	,	Ce-143		4×10^{-4}
Xenon-133 (Xe-133)	100		Ce-144		1×10^{-4}
Xenon-135 (Xe-135)	100	Cesium (55)	Cs-131		$2x10^{-2}$ $6x10^{-2}$
Ytterbium-169 (Yb-169)	10		Cs-134m Cs-134		9x10 ⁻⁵
Ytterbium-175 (Yb-175)	100	Chlorine (17)	Cl-38	$9x10^{-7}$	4×10^{-3}
Yttrium-87 (Y-87)	10	Chromium (24)	Cr-51	2.1.0	2×10^{-2}
Yttrium-90 (Y-90)	10	Cobalt (27)	Co-57		5×10^{-3}
Yttrium-91 (Y-91)	10		Co-58		1×10^{-3}
Yttrium-92 (Y-92)	100	Copper (29)	Co–60 Cu–64		$5x10^{-4}$ $3x10^{-3}$
Yttrium-93 (Y-93)	100	Dysprosium (66)	Dy-165		4×10^{-3}
Zinc-65 (Zn-65)	10	Dyoproolum (00)	Dy-166		4×10^{-4}
Zinc-69m (Zn-69m)	100	Erbium (68)	Er-169		9×10^{-4}
Zinc-69 (Zn-69)	1,000		Er-171		1x10 ⁻³
Zirconium-93 (Zr-93)	10	Europium (63)	Eu-152		$6x10^{-4}$
Zirconium-95 (Zr-95)	10		(9.2 h) Eu-155		$2x10^{-3}$
Zirconium-97 (Zr-97)	10	Fluorine (9)	F-18	$2x10^{-6}$	8x10 ⁻³
Any radioactive material not listed		Gadolinium (64)	Gd-153		$2x10^{-3}$
other than alpha emitting radioactive		O 111 (2.1)	Gd-159		8x10 ⁻⁴
rial	0.1	Gallium (31) Germanium (32)	Ga-72 Ge-71		$4x10^{-4} 2x10^{-2}$
		Gold (79)	Au-196		2×10^{-3}
[Statutory Authority: RCW 43.70.040, 91–02		Join (17)	Au-198		5×10^{-4}
codified as § 246–232–120, filed 12/27/90, eff tory Authority: RCW 70.98.080, 83–19–050 (C			Au-199		$2x10^{-3}$
550, filed 9/16/83; 79–12–073 (Order 1459)		Hafnium (72)	Hf-181	z 10-6	$7x10^{-4}$
11/30/79, effective 1/1/80. Formerly WAC 40	2–20–240.]	Hydrogen (1)	H-3	$5x10^{-6}$	$3x10^{-2}$ $1x10^{-2}$
		Indium (49)	In-113m In-114m		$2x10^{-4}$
		Iodine (53)	I–125	$3x10^{-9}$	2×10^{-3}
		(,	I-126	$3x10^{-9}$	$2x10^{-3}$
			I-131	3×10^{-9}	$2x10^{-3}$
			I-132	8×10^{-8}	6x10 ⁻⁴
			I-133 I-134	$ \begin{array}{r} 1 \times 10^{-8} \\ 2 \times 10^{-7} \end{array} $	7×10^{-5} 1×10^{-3}
		Iridium (77)	I=134 Ir=190	4A1U	$2x10^{-3}$
		111u1uiii (<i>11)</i>	Ir-190 Ir-192		$4x10^{-4}$
			Ir-194		$3x10^{-4}$
		Iron (26)	Fe-55		$8x10^{-3}$
		V(20)	Fe-59	1×10^{-6}	$6x10^{-4}$
		Krypton (36)	Kr–85m Kr–85	$3x10^{-6}$	
			111-03	5.410	

Element (atomic number)	Isotope	Column I Gas con- centra- tion	Column II Liquid and solid concen— tration	Element (atomic number)	Isotope	Column I Gas con- centra- tion	Column II Liquid and solid concen— tration μ Ci/ml ²
Lanthanum (57)	La-140		2x10 ⁻⁴	Terbium (65)	Tb-160		4x10 ⁻⁴
Lead (82)	Pb-203		4×10^{-3}	Thallium (81)	Tl-200		4×10^{-3}
Lutetium (71)	Lu-177		1×10^{-3}		Tl-201		3×10^{-3}
Manganese (25)	Mn-52		$3x10^{-4}$		Tl-202		$ \begin{array}{c} 1 \times 10^{-3} \\ 1 \times 10^{-3} \end{array} $
	Mn-54 Mn-56		$1 \times 10^{-3} \\ 1 \times 10^{-3}$	Thulium (69)	Tl-204 Tm-170		5×10^{-4}
Mercury (80)	Hg-197m		2×10^{-3}	Thunum (09)	Tm-171		5x10 ⁻³
Wicically (60)	Hg-197		3x10 ⁻³	Tin (50)	Sn-113		$9x10^{-4}$
	Hg-203		$2x10^{-4}$		Sn-125		$2x10^{-4}$
Molybdenum (42)	Mo-99		$2x10^{-3}$	Tungsten	W 101		4 10-3
Neodymium (60)	Nd-147		$ 6x10^{-4} 3x10^{-3} $	(Wolfram) (74)	W-181 W-187		$4x10^{-3} \\ 7x10^{-4}$
NI: al-al (20)	Nd-149		1×10^{-3}	Vanadium (23)	W-187 V-48		$3x10^{-4}$
Nickel (28) Niobium	Ni-65		1310	Xenon (54)	Xe-131m	$4x10^{-6}$	5810
(Columbium) (41)	Nb-95		1×10^{-3}	,	Xe-133	$3x10^{-6}$	
(, (,	Nb-97		9×10^{-3}		Xe-135	1×10^{-6}	1
Osmium (76)	Os-185		7×10^{-4}	Ytterbium (70)	Yb-175		1×10^{-3} 2×10^{-4}
	Os-191m		$ 3x10^{-2} \\ 2x10^{-3} $	Yttrium (39)	Y-90 Y-91m		$3x10^{-2}$
	Os–191 Os–193		$6x10^{-4}$		Y-91		3x10 ⁻⁴
Palladium (46)	Pd-103		3×10^{-3}		Y-92		6×10^{-4}
Tanadiam (10)	Pd-109		$9x10^{-4}$		Y-93		3×10^{-4}
Phosphorus (15)	P-32		$2x10^{-4}$	Zinc (30)	Zn-65		1×10^{-3}
Platinum (78)	Pt-191		1×10^{-3}		Zn-69m Zn-69		$7x10^{-4} 2x10^{-2}$
	Pt-193m		1×10^{-2} 1×10^{-2}	Zirconium (40)	Zr-95		$6x10^{-4}$
	Pt-197m Pt-197		1×10^{-3}	Zircomain (40)	Zr-97		$2x10^{-4}$
Potassium (19)	K-42		3x10 ⁻³				
Praseodymium (59)	Pr-142		$3x10^{-4}$	Beta and/or gamma			
• • •	Pr-143		5×10^{-4}	active material not l		1x10 ⁻¹⁰	1×10^{-6}
Promethium (61)	Pm-147		$2x10^{-3}$	half-life less than 3	years	1X10	IXIU
D - 4' (00)	Pm-149		4×10^{-4} 1×10^{-7}				
Radium (88)	Ra-226 Ra-228		$3x10^{-7}$	Notes:			
Rhenium (75)	Re-183		6×10^{-3}	¹ Values are given	in Column I	only for those	materials normally
	Re-186		$9x10^{-4}$	used as gases		,	•
	Re-188		6×10^{-4}	² μCi/gm for solids	1		
Rhodium (45)	Rh-103m		1×10^{-1} 1×10^{-3}	Note 1: Many radi	oisotopes disinte	egrate into isot	opes which are also
Rubidium	Rh-105 Rb-86		$7x10^{-4}$				ions in Schedule C
Ruthenium (44)	Ru-97		4×10^{-3}	-		of the parent iso	otope and takes into
, ,	Ru-103		$8x10^{-4}$	account the	e daughters.		
	Ru-105		1×10^{-3}	Note 2: For purpo	ses of WAC 4	02-19-190(2)	where there is in-
Samarium (62)	Ru-106 Sm-153		1x10 ⁻⁴ 8x10 ⁻⁴			· '	it for the combina-
Samarium (62) Scandium (21)	Sc-46		4x10 ⁻⁴				ine for each isotope
50411-514111 (21)	Sc-47		9×10^{-4}				entration present in tion established in
	Sc-48		$3x10^{-4}$				not in combination.
Selenium (34)	Se-75		3×10^{-3}	The sum of	f such ratios ma	ay not exceed "	1" (i.e., unity).
Silicon (14) Silver (47)	Si-31 Ag-105		9×10^{-3} 1×10^{-3}	Example:			
Silver (47)	Ag-103 Ag-110m		$3x10^{-4}$	•			
	Ag-111		4×10^{-4}	Cond	centration of Isc	tope A in Prod	uct
Sodium (11)	Na-24		$2x10^{-3}$	E _w	empt concentrate	ion of Instance	Α
Strontium (38)	Sr-85		$ \begin{array}{c} 1 \times 10^{-3} \\ 1 \times 10^{-4} \end{array} $	EX	•	•	A
	Sr–89 Sr–91		7×10^{-4}		+		
	Sr-92		7×10^{-4}	Cone	centration of Iso	tope B in Prod	uct
Sulfur (16)	S-35	$9x10^{-8}$	6×10^{-4}				
Tantalum (73)	Ta-182		4×10^{-4}	Ex	empt concentra	tion of Isotope	В
Technetium (43)	Tc-96m		1x10 ⁻¹		≤	1	
Tellurium (52)	Tc-96 Te-125m		$ \begin{array}{c} 1x10^{-3} \\ 2x10^{-3} \end{array} $	Note 3: For the pu	rnose of determ	ining concentre	tion in a product or
renarium (32)	Te-123m Te-127m		6×10^{-4}				material present is
	Te-127		$3x10^{-3}$				the discrete part or
	Te-129m		3×10^{-4}				tive material is rel-
	Te-131m		$6x10^{-4}$ $3x10^{-4}$				ht or volume of this
	Te-132		3X10	part or con	iiponent cannot	ne determined	then the product or

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device should be evaluated on the basis of the total quantity of radioactive material present.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-232-130, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-19-580, filed 12/11/86; 83-19-050 (Order 2026), § 402-19-580, filed

9/16/83; 79–12–073 (Order 1459), § 402–19–580, filed 11/30/79, effective 1/1/80. Formerly WAC 402–20–250.]

WAC 246-232-140 Schedule D.

ACCEPTABLE SURFACE CONTAMINATION LEVELS

NUCLIDES A	average B C F	MAXIMUM B D F	REMOVABLE B E F WIPE LIMITS
U-nat, U-235, U-238, and associated decay products	5,000 dpm $\alpha/100$ cm2	15,000 dpm $\alpha/100$ cm2	1,000 dpm $\alpha/100 \text{ cm}2$
Transuranics, Ra-226, Ra-228, Th-230, Th-228, Pa-231, Ac-227, I-125, I-129	100 dpm/100 cm2	300 dpm/100 cm2	20 dpm/100 cm2
Th-nat, Th-232, Sr-90, Ra-223, Ra-224, U-232, I-126, I-131, I-133	1000 dpm/100 cm2	3000 dpm/100 cm2	200 dpm/100 cm2
Beta-gamma emitters (nuclides with decay modes other than alpha emission or spontaneous fission) except SR-90 and others noted above	5000 dpm $eta\gamma/100$ cm2	15,000 dpm $\beta\gamma/100$ cm2	1000 dpm $\beta\gamma/100$ cm2

- A Where surface contamination by both alpha- and beta-gamma-emitting nuclides exists, the limits established for alpha- and beta-gamma-emitting nuclides should apply independently.
- B As used in this table, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.
- C Measurements of average contaminant should not be averaged over more than 1 square meter. For objects of less surface area, the average should be derived for each such object.
- D The maximum contamination level applies to an area of not more than 100 cm².
- E The amount of removable radioactive material per 100 cm² of surface area should be determined by wiping that area with dry filter or soft absorbent paper, applying moderate pressure, and assessing the amount of radioactive material on the wipe with an appropriate instrument of known efficiency. When removable contamination on objects of less surface area is determined, the pertinent levels should be reduced proportionally and the entire surface should be wiped.
- F The average and maximum radiation levels associated with surface contamination resulting from beta-gamma emitters should not exceed 0.2 mrad/hr at 1 cm and 1.0 mrad/hr at 1 cm, respectively, measured through not more than 7 milligrams per square centimeter of total absorber.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as \$ 246-232-140, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), \$ 402-19-590, filed 12/11/86; 83-19-050 (Order 2026), \$ 402-19-590, filed 9/16/83.]

WAC 246-232-990 Fees. Fees are required from all applicants, licensees, or registrants. Chapter 402-70 WAC specifies fees for owners or operators of uranium or thorium mills and their associated mill tailings as authorized pursuant to RCW 70.121.030. Chapter 440-44 WAC specifies fees for all other applicants pursuant to chapter 43.20A RCW.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as \$246-232-990, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83-19-050 (Order 2026), \$402-19-370, filed 9/16/83; 79-12-073 (Order 1459), \$402-19-370, filed 11/30/79, effective 1/1/80.]

Chapter 246–233 WAC RADIOACTIVE MATERIALS--GENERAL LICENSES

WAC

246-233-001 Purpose and scope.

246-233-010 General licenses—Source material.

246–233–020 General licenses*—Radioactive material other than source material.

WAC 246-233-001 Purpose and scope. This chapter establishes general licenses for the possession and use of radioactive material contained in certain items and a general license for ownership of radioactive material. Chapter 402-19 WAC also contains provisions applicable to the subject matter of this part.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-233-001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 79-12-073 (Order 1459), § 402-21-010, filed 11/30/79, effective 1/1/80. Formerly chapter 402-20 WAC.]

WAC 246-233-010 General licenses--Source material. (1) A general license is hereby issued authorizing use, possession, and transfer of not more than fifteen pounds of source material at any one time by persons in the following categories:

- (a) Pharmacists using the source material solely for the preparation of medicinal compounds;
- (b) Physicians using the source material for medicinal purposes;

- (c) Persons receiving possession of source material from pharmacists and physicians in the form of medicinals or drugs;
- (d) Commercial and industrial firms, and research, educational, and medical institutions, and state and local government agencies for research, development, educational, operational, or commercial purposes: And provided, That no such person shall, pursuant to this general license, receive more than a total of one hundred fifty pounds of source material in any one calendar year.
- (2) Persons who receive, possess, use, or transfer source material pursuant to the general license issued in subsection (1) of this section are exempt from the provisions of chapters 402–24 and 402–48 WAC to the extent that such receipt, possession, use, or transfer is within the terms of such general license: *Provided*, *however*, That this exemption shall not be deemed to apply to any such person who is also in possession of source material under a specific license issued pursuant to chapter 402–22 WAC.
- (3) A general license is hereby issued authorizing the receipt of title to source material without regard to quantity. This general license does not authorize any person to receive, possess, use, or transfer source material.
- (4) Depleted uranium in industrial products and devices.
- (a) A general license is hereby issued to receive, acquire, possess, use, or transfer, in accordance with the provisions of paragraphs (4)(b), (c), (d), and (e) of this section, depleted uranium contained in industrial products or devices for the purpose of providing a concentrated mass in a small volume of the product or device.
- (b) The general license in paragraph (4)(a) of this section applies only to industrial products or devices which have been manufactured either in accordance with a specific license issued to the manufacturer of the products or devices pursuant to WAC 402-22-110 (13) or in accordance with a specific license issued to the manufacturer by the United States Nuclear Regulatory Commission or an agreement state which authorizes manufacture of the products or devices for distribution to persons generally licensed by the United States Nuclear Regulatory Commission or an agreement state.
- (c)(i) Persons who receive, acquire, possess, or use depleted uranium pursuant to the general license established by paragraph (4)(a) of this section shall file department form RHF-20 "Registration certificate Use of depleted uranium under general license," with the department. The form shall be submitted within thirty days after the first receipt or acquisition of such depleted uranium. The registrant shall furnish on department form RHF-20 the following information and such other information as may be required by that form:
 - (A) Name and address of the registrant;
- (B) A statement that the registrant has developed and will maintain procedures designed to establish physical control over the depleted uranium described in paragraph (4)(a) of this section and designed to prevent transfer of such depleted uranium in any form, including

- metal scrap, to persons not authorized to receive the depleted uranium; and
- (C) Name and/or title, address, and telephone number of the individual duly authorized to act for and on behalf of the registrant in supervising the procedures identified in item (4)(c)(i)(B) of this section.
- (ii) The registrant possessing or using depleted uranium under the general license established by paragraph (4)(a) of this section shall report in writing to the department any changes in information previously furnished on the "Registration certificate Use of depleted uranium under general license." The report shall be submitted within thirty days after the effective date of such change.
- (d) A person who receives, acquires, possesses, or uses depleted uranium pursuant to the general license established by paragraph (4)(a) of this section:
- (i) Shall not introduce such depleted uranium, in any form, into a chemical, physical, or metallurgical treatment or process, except a treatment or process for repair or restoration of any plating or other covering of the depleted uranium.
 - (ii) Shall not abandon such depleted uranium.
- (iii) Shall transfer or dispose of such depleted uranium only by transfer in accordance with the provision of chapter 402–19 WAC. In the case where the transferee receives the depleted uranium pursuant to the general license established by paragraph (4)(a) of this section the transferor shall furnish the transferee a copy of this regulation and a copy of department form RHF–20.

In the case where the transferee receives the depleted uranium pursuant to a general license contained in the United States Nuclear Regulatory Commission's or agreement state's regulation equivalent to paragraph (4)(a) of this section the transferor shall furnish the transferee a copy of this regulation and a copy of department form RHF-20 accompanied by a note explaining that use of the product or device is regulated by the United States Nuclear Regulatory Commission or agreement state under requirements substantially the same as those in this regulation.

- (iv) Shall maintain and make available to the department upon request the name and address of the person receiving the depleted uranium pursuant to such transfer.
- (v) Shall not export such depleted uranium except in accordance with a license issued by the United States Nuclear Regulatory Commission pursuant to 10 CFR Part 110.
- (e) Any person receiving, acquiring, possessing, using, or transferring depleted uranium pursuant to the general license established by paragraph (4)(a) of this section is exempt from the requirements of chapters 402–24 and 402–48 WAC of these regulations with respect to the depleted uranium covered by that general license.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–233–010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–21–030, filed 12/8/80. Statutory Authority: RCW 70.98.080. 79–12–073 (Order 1459), § 402–21–030, filed 11/30/79, effective 1/1/80. Formerly WAC 402–20–030.]

WAC 246-233-020 General licenses*--Radioactive material other than source material.

*Note: Different general licenses are issued in this section, each of which has its own specific conditions and requirements.

- (1) Certain devices and equipment. A general license is hereby issued to transfer, receive, acquire, own, possess, and use radioactive material incorporated in the following devices or equipment which have been manufactured, tested and labeled by the manufacturer in accordance with a specific license issued to the manufacturer by the United States Nuclear Regulatory Commission for use pursuant to Section 31.3 of 10 CFR Part 31. This general license is subject to the provisions of WAC 402-12-080 through 402-12-140, chapters 402-19, 402-24** and 402-48 WAC.
- (a) Static elimination device. Devices designed for use as static eliminators which contain, as a sealed source or sources, radioactive material consisting of a total of not more than 500 microcuries of Polonium-210 per device.
- (b) Ion generating tube. Devices designed for ionization of air which contain, as a sealed source or sources, radioactive material consisting of a total of not more than 500 microcuries of Polonium-210 per device or a total of not more than 50 millicuries of Hydrogen-3 (tritium) per device.
- **Attention is directed particularly to the provisions of chapter 402-24 WAC of these regulations which relate to the labeling of containers.
 - (2) Reserved.
 - (3) Reserved.
 - (4) Certain measuring, gauging or controlling devices.
- (a) A general license is hereby issued to commercial and industrial firms and research, educational and medical institutions, individuals in the conduct of their business, and state or local government agencies to own, acquire, receive, possess, use or transfer, in accordance with the provisions of (b), (c), and (d) of this subsection, radioactive material excluding special nuclear material contained in devices designed and manufactured for the purpose of detecting, measuring, gauging or controlling thickness, density, level, interface location, radiation, leakage, or qualitative or quantitative chemical composition, or for producing light or an ionized atmosphere.
- (b) The general license in (a) of this subsection applies only to radioactive material contained in devices which have been manufactured and labeled in accordance with the specifications contained in a specific license issued by the department pursuant to WAC 402–22–110(4) or in accordance with the Nuclear Regulatory Commission, an agreement state or a licensing state, which authorizes distribution of devices to persons generally licensed by the United States Nuclear Regulatory Commission, an agreement state or licensing state**.
- *Note: Regulations under the Federal Food, Drug, and Cosmetic Act authorizing the use of radioactive control devices in food production require certain additional labeling thereon which is found in Section 179.21 of 21 CFR Part 179.
- (c) Any person who owns, acquires, receives, possesses, uses or transfers radioactive material in a device pursuant to the general license in (a) of this subsection:

- (i) Shall assure that all labels affixed to the device at the time of receipt and bearing a statement that removal of the label is prohibited are maintained thereon and shall comply with all instructions and precautions provided by such labels;
- (ii) Shall assure that the device is tested for leakage of radioactive material and proper operation of the on-off mechanism and indicator, if any, at no longer than six-month intervals or at such other intervals as are specified in the label, however:
- (A) Devices containing only krypton need not be tested for leakage of radioactive material; and
- (B) Devices containing only tritium or not more than 100 microcuries of other beta and/or gamma emitting material or 10 microcuries of alpha emitting material need not be tested for any purpose. Devices held in storage in the original shipping container prior to initial installation need not be tested until immediately prior to use;
- (iii) Shall assure that the tests required by (c)(ii) of this subsection and other testing, installation, servicing, and removal from installation involving the radioactive materials, its shielding or containment, are performed:
- (A) In accordance with the instructions provided by the labels; or
- (B) By a person holding a specific license from the department or from the United States Nuclear Regulatory Commission or from any agreement state or from a licensing state to perform such activities;
- (iv) Shall maintain records showing compliance with the requirements of (c)(ii) and (iii) of this subsection. The records shall show the results of tests. The records also shall show the dates of performance and the names of persons performing, testing, installation, servicing, and removal from installation concerning the radioactive material, its shielding or containment. Records of tests for leakage of radioactive material required by (c)(ii) of this subsection shall be maintained for one year after the next required leak test is performed or the sealed source is transferred or disposed. Records of tests of the on/off mechanism and indicator required by (c)(ii) of this subsection shall be maintained for one year after the next required test of the on/off mechanism and indicator is performed or the sealed source is transferred or disposed. Records of other testing, installation, servicing, and removal from installation required by (c)(iii) of this subsection shall be maintained for a period of two years from the date of the recorded event or until the device is transferred or disposed;
- (v) Upon the occurrence of a failure of or damage to, or any indication of a possible failure of or damage to, the shielding of the radioactive material or the on/off mechanism or indicator, or upon the detection of 0.005 microcuries or more removable radioactive material, shall immediately suspend operation of the device until it has been repaired by the manufacturer or other person holding a specific license from the department, the United States Nuclear Regulatory Commission, or from an agreement state or a licensing state to repair such devices, or disposed by transfer to a person authorized by a specific license to receive the radioactive material

contained in the device and, within thirty days, furnish to the department a written report containing a brief description of the event and the remedial action taken;

- (vi) Shall not abandon the device containing radioactive material;
- (vii) Except as provided in (c)(viii) of this subsection, shall transfer or dispose the device containing radioactive material only by transfer to a person holding a specific license of the department, the United States Nuclear Regulatory Commission, or an agreement state, or a licensing state whose specific license authorizes the person to receive the device and within thirty days after transfer of a device to a specific licensee shall furnish to the department a report containing identification of the device by manufacturer's name, model number and the name and address of the person receiving the device. No report is required if the device is transferred to the specific licensee in order to obtain a replacement device;
- (viii) Shall transfer the device to another general licensee only:
- (A) Where the device remains in use at a particular location. In such case, the transferor shall give the transferee a copy of this subsection and any safety documents identified in the label of the device and within thirty days of the transfer, report to the department the manufacturer's name, model number of device transferred, the name and address of the transferee, and the name and/or position of an individual who may constitute a point of contact between the department and the transferee; or
- (B) Where the device is held in storage in the original shipping container at its intended location of use prior to initial use by a general licensee:
- (ix) Shall comply with the provisions of WAC 402-24-180 and 402-24-190 for reporting radiation incidents, theft or loss of licensed material, but shall be exempt from the other requirements of chapters 402-24 and 402-48 WAC.
- (d) The general license in (a) of this subsection does not authorize the manufacture, import or export of devices containing radioactive material.
- (e) The general license provided in this subsection is subject to the provisions of WAC 402-12-080 through 402-12-100, 402-12-130, 402-12-140, 402-12-170, 402-19-300, 402-19-350, 402-19-400, and 402-19-500.
 - (5) Luminous safety devices for aircraft.
- (a) A general license is hereby issued to own, receive, acquire, possess and use tritium or Promethium-147 contained in luminous safety devices for use in aircraft, provided:
- (i) Each device contains not more than 10 curies of tritium or 300 millicuries of Promethium-147; and
- (ii) Each device has been manufactured, assembled or imported in accordance with a specific license issued by the United States Nuclear Regulatory Commission, or each device has been manufactured or assembled in accordance with the specifications contained in a specific license issued by the department or any agreement state

- to the manufacturer or assembler of such device pursuant to licensing requirements equivalent to those in Section 32.53 of 10 CFR Part 32 of the regulations of the United States Nuclear Regulatory Commission.
- (b) Persons who own, receive, acquire, possess or use luminous safety devices pursuant to the general license in this subsection are exempt from the requirements of chapters 402–24 and 402–48 WAC except that they shall comply with the provisions of WAC 402–24–180 and 402–24–190.
- (c) This general license does not authorize the manufacture, assembly, or repair of luminous safety devices containing tritium or Promethium-147.
- (d) This general license does not authorize the ownership, receipt, acquisition, possession or use of Promethium-147 contained in instrument dials.
- (e) This general license is subject to the provisions of WAC 402-12-080 through 402-12-140, 402-12-170, 402-19-300, 402-19-350, 402-19-400, and 402-19-500.
- (6) Ownership of radioactive material. A general license is hereby issued to own radioactive material without regard to quantity. Notwithstanding any other provisions of this chapter, this general license does not authorize the manufacture, production, transfer, receipt, possession or use of radioactive material.
 - (7) Calibration and reference sources.
- (a) A general license is hereby issued to those persons listed below to own, receive, acquire, possess, use and transfer, in accordance with the provisions of (d) and (e) of this subsection, Americium—241 in the form of calibration or reference sources:
- (i) Any person who holds a specific license issued by the department which authorizes that person to receive, possess, use and transfer radioactive material; or
- (ii) Any person who holds a specific license issued by the United States Nuclear Regulatory Commission which authorizes that person to receive, possess, use and transfer special nuclear material.
- (b) A general license is hereby issued to own, receive, possess, use and transfer plutonium in the form of calibration or reference sources in accordance with the provisions of (d) and (e) of this subsection to any person who holds a specific license issued by the department which authorizes that person to receive, possess, use and transfer radioactive material.
- (c) A general license is hereby issued to own, receive, possess, use and transfer Radium-226 in the form of calibration or reference sources in accordance with the provisions of (d) and (e) of this subsection to any person who holds a specific license issued by the department which authorizes that person to receive, possess, use and transfer radioactive material.
- (d) The general licenses in (a), (b) and (c) of this subsection apply only to calibration or reference sources which have been manufactured in accordance with the specifications contained in a specific license issued to the manufacturer or importer of the sources by the United States Nuclear Regulatory Commission pursuant to Section 32.57 of 10 CFR Part 32 or Section 70.39 of 10

CFR Part 70 or which have been manufactured in accordance with the specifications contained in a specific license issued to the manufacturer by the department or any agreement state or licensing state pursuant to licensing requirements equivalent to those contained in Section 32.57 of 10 CFR Part 32 or Section 70.39 of 10 CFR Part 70 of the regulations of the United States Nuclear Regulatory Commission.

(e) The general licenses provided in (a), (b) and (c) of this subsection are subject to the provisions of WAC 402-12-080 through 402-12-100, 402-12-130, 402-12-140, 402-12-170, 402-19-300, 402-19-350, 402-19-400, 402-19-500, chapters 402-24 and 402-48 WAC.

In addition, persons who own, receive, acquire, possess, use or transfer one or more calibration or reference sources pursuant to these general licenses:

- (i) Shall not possess at any one time, at any one location of storage or use, more than 5 microcuries of Americium-241 and 5 microcuries of plutonium and 5 microcuries of Radium-226 in such sources:
- (ii) Shall not receive, possess, use or transfer such source unless the source, or the storage container, bears a label which includes one of the following statements or a substantially similar statement which contains the information called for in the following statement:
 - (A) The receipt, possession, use and transfer of this source, Model ______, Serial No. _____, are subject to a general license and the regulations of the United States Nuclear Regulatory Commission or of a state with which the commission has entered into an agreement for the exercise of regulatory authority. Do not remove this label.

CAUTION — RADIOACTIVE MATERIAL — THIS SOURCE CONTAINS (AMERICIUM—241). (PLUTONIUM)*. DO NOT TOUCH RADIOACTIVE PORTION OF THIS SOURCE

Name of manufacturer or importer

*Note: Showing only the name of the appropriate material.

(B) The receipt, possession, use and transfer of this source, Model _____, Serial No. _____, are subject to a general license and the regulations of any licensing state. Do not remove this label.

Caution — radioactive material — this source contains radium—226. Do not touch radioactive portion of this source.

Name of manufacturer or importer

- (iii) Shall not transfer, abandon, or dispose of such source except by transfer to a person authorized by a license from the department, the United States Nuclear Regulatory Commission, or an agreement state or licensing state to receive the source;
- (iv) Shall store such source, except when the source is being used, in a closed container adequately designed and constructed to contain Americium-241, Plutonium,

- or Radium-226/Radon-222 which might otherwise escape during storage; and
- (v) Shall not use such source for any purpose other than the calibration of radiation detectors or the standardization of other sources.
- (f) These general licenses do not authorize the manufacture of calibration or reference sources containing Americium—241, Plutonium, or Radium—226.
- (8) General license for use of radioactive material for certain in vitro clinical or laboratory testing.*
- (a) A general license is hereby issued to any physician, veterinarian, clinical laboratory or hospital to receive, acquire, possess, transfer or use, for any of the following stated tests, in accordance with the provisions of or use, for any of the following stated tests, in accordance with the provisions of (b), (c), (d), (e), and (f) of this subsection the following radioactive materials in prepackaged units:
- (i) Iodine-125, in units not exceeding 10 microcuries each for use in *in vitro* clinical or laboratory tests not involving internal or external administration of radioactive material, or the radiation therefrom, to human beings or animals.
- (ii) Iodine-131, in units not exceeding 10 microcuries each for use in *in vitro* clinical or laboratory tests not involving internal or external administration of radioactive material, or the radiation therefrom, to human beings or animals.
- (iii) Carbon-14, in units not exceeding 10 microcuries each for use in *in vitro* clinical or laboratory tests not involving internal or external administration of radioactive material, or the radiation therefrom, to human beings or animals.
- (iv) Hydrogen-3 (tritium), in units not exceeding 50 microcuries each for use in *in vitro* clinical or laboratory tests not involving internal or external administration of radioactive material, or the radiation therefrom, to human beings or animals.
- (v) Iron-59, in units not exceeding 20 microcuries each for use in *in vitro* clinical or laboratory tests not involving internal or external administration of radioactive material, or the radiation therefrom, to human beings or animals.
- (vi) Cobalt-57, in units not exceeding 10 microcuries each for use in *in vitro* clinical or laboratory tests not involving internal or external administration of radioactive material, or the radiation therefrom, to human beings or animals.
- (vii) Selenium-75, in units not to exceed 10 microcuries each for use in *in vitro* clinical or laboratory tests not involving internal or external administration of radioactive material, or the radiation therefrom, to human beings or animals.
- (viii) Mock Iodine-125 reference or calibration sources, in units not exceeding 0.05 microcurie of Iodine-129 and 0.005 microcurie of Americium-241 each for use in *in vitro* clinical or laboratory tests not involving internal or external administration of radioactive material, or the radiation therefrom, to human beings or animals.

*Note: The new drug provisions of the Federal Food, Drug and Cosmetic Act also govern the availability and use of any specific diagnostic drugs in interstate commerce.

- (b) No person shall receive, acquire, possess, use or transfer radioactive material pursuant to the general license established by (a) of this subsection until that person has received a validated copy of department Form RHF-15 "Certificate-in vitro testing with radioactive material under general license." Annual validation requires resubmittal of revised department Form RHF-15 and submittal of the annual fee to the department. The physician, veterinarian, clinical laboratory or hospital shall furnish on department Form RHF-15 the following information and such other information as may be required by that form:
- (i) Name and address of the physician, veterinarian, clinical laboratory or hospital;
 - (ii) The location of use; and
- (iii) A statement that the physician, veterinarian, clinical laboratory or hospital has appropriate radiation measuring instruments to carry out *in vitro* clinical or laboratory tests with radioactive material as authorized under the general license in (a) of this subsection and that such tests will be performed only by personnel competent in the use of such instruments and in the handling of the radioactive material.
- (c) A person who receives, acquires, possesses or uses radioactive material pursuant to the general license established by (a) of this subsection shall comply with the following:
- (i) The general licensee shall not possess at any one time, pursuant to the general license in (a) of this subsection at any one location of storage or use, a total amount of Iodine-125, Iodine-131, Selenium-75, Iron-59, and/or Cobalt-57 in excess of 200 microcuries.
- (ii) The general licensee shall store the radioactive material, until used, in the original shipping container or in a container providing equivalent radiation protection.
- (iii) The general licensee shall use the radioactive material only for the uses authorized by (a) of this subsection.
- (iv) The general licensee shall not transfer the radioactive material to a person who is not authorized to receive it pursuant to a license issued by the department, the United States Nuclear Regulatory Commission, any agreement state or licensing state, nor transfer the radioactive material in any manner other than in the unopened, labeled shipping container as received from the supplier.
- (v) The general licensee shall dispose of the Mock Iodine-125 reference or calibration sources described in (a)(viii) of this subsection as required by WAC 402-24-130.
- (d) The general licensee shall not receive, acquire, possess, or use radioactive material pursuant to (a) of this subsection:
- (i) Except as prepackaged units which are labeled in accordance with the provision of an applicable specific license issued pursuant to WAC 402-22-110(8) or in

accordance with the provisions of a specific license issued by the United States Nuclear Regulatory Commission, or any agreement state or licensing state which authorizes the manufacture and distribution of Iodine—125, Iodine—131, Carbon—14, Hydrogen—3 (tritium), Iron—59, Selenium—75, Cobalt—57, or Mock Iodine—125 to persons generally licensed under this subsection or its equivalent; and

(ii) Unless one of the following statements, as appropriate, or a substantially similar statement which contains the information called for in one of the following statements, appears on a label affixed to each prepackaged unit or appears in a leaflet or brochure which accompanies the package:

This radioactive material shall be received, acquired, possessed and used only by physicians, veterinarians, clinical laboratories or hospitals and only for *in vitro* clinical or laboratory tests not involving internal or external administration of the material, or the radiation therefrom, to human beings or animals. Its receipt, acquisition, possession, use and transfer are subject to the regulations and a general license of the United States Nuclear Regulatory Commission or of a state with which the commission has entered into an agreement for the exercise of regulatory authority.

Name of manufacturer

This radioactive material shall be received, acquired, possessed and used only by physicians, veterinarians, clinical laboratories or hospitals and only for *in vitro* clinical or laboratory tests not involving internal or external administration of the material, or the radiation therefrom, to human beings or animals. Its receipt, acquisition, possession, use and transfer are subject to the regulations and a general license of a licensing state.

Name of manufacturer

- (e) The physician, veterinarian, clinical laboratory or hospital possessing or using radioactive material under the general license of (a) of this subsection shall report in writing to the department, any changes in the information previously furnished in the "Certificate in vitro testing with radioactive material under general license," department Form RHF-15. The report shall be furnished within thirty days after the effective date of such change.
- (f) This general license is subject to the provisions of WAC 402-12-080 through 402-12-100, 402-12-130, 402-12-140, 402-12-160 and 402-12-170. In addition, any person using radioactive material pursuant to the general license of (a) of this subsection is exempt from the requirements of chapters 402-24 and 402-48 WAC with respect to radioactive material covered by that general license, except that such persons using the Mock Iodine-125 described in (a)(viii) of this subsection shall comply with the provisions of WAC 402-24-130, 402-24-180, and 402-24-190 and of these regulations.

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- (9) Ice detection devices.
- (a) A general license is hereby issued to own, receive, acquire, possess, use and transfer Strontium-90 contained in ice detection devices, provided each device contains not more than 50 microcuries of Strontium-90 and each device has been manufactured or imported in accordance with a specific license issued by the United States Nuclear Regulatory Commission or each device has been manufactured in accordance with the specifications contained in a specific license issued by the department or any agreement state to the manufacturer of such device pursuant to licensing requirements equivalent to those in Section 32.61 of 10 CFR Part 32 of the regulations of the United States Nuclear Regulatory Commission.
- (b) Persons who own, receive, acquire, possess, use or transfer Strontium-90 contained in ice detection devices pursuant to the general license in (a) of this subsection:
- (i) Shall, upon occurrence of visually observable damage, such as a bend or crack or discoloration from overheating to the device, discontinue use of the device until it has been inspected, tested for leakage and repaired by a person holding a specific license from the United States Nuclear Regulatory Commission or an agreement state to manufacture or service such devices; or shall dispose of the device pursuant to the provisions of these regulations;
- (ii) Shall assure that all labels affixed to the device at the time of receipt, and which bear a statement which prohibits removal of the labels, are maintained thereon; and
- (iii) Are exempt from the requirements of chapters 402-24 and 402-48 WAC except that such persons shall comply with the provisions of WAC 402-24-130, 402-24-180, and 402-24-190.
- (c) This general license does not authorize the manufacture, assembly, disassembly or repair of Strontium-90 sources in ice detection devices.
- (d) This general license is subject to the provision of WAC 402-12-080 through 402-12-100, 402-12-130, 402-12-140, 402-12-170, 402-19-300, 402-19-350, 402-19-400, and 402-19-500.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–233–020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–21–050, filed 12/11/86; 83–19–050 (Order 2026), § 402–21–050, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–21–050, filed 12/8/80. Statutory Authority: RCW 70.98.080. 79–12–073 (Order 1459), § 402–21–050, filed 11/30/79, effective 1/1/80. Formerly WAC 402–20–040.]

Chapter 246-235 WAC RADIOACTIVE MATERIALS--SPECIFIC LICENSES

WAC	
246-235-001	Purpose and scope.
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246–235–060 246–235–070	Amendment of licenses at request of licensee. Agency action on applications to renew or amend.
246–235–080	Special requirements for issuance of certain specific licenses for radioactive material.
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246–235–100	Special requirements for a specific license to manufacture, assemble, repair, or distribute commodities products, or devices which contain radioactive material.
246-235-110	Special requirements for issuance of specific licenses for source material milling.
246-235-120	Schedule A groups of medical uses of radioactive ma terial (ref. WAC 402–22–070(3) and 402–22–110(9)).
246-235-130	Appendix—General laboratory rules for safe use of unsealed sources.

WAC 246-235-001 Purpose and scope. (1) This chapter prescribes requirements for the issuance of specific licenses.

Schedule B, limits for broad licenses.

(2) The provisions and requirements of this chapter are in addition to, and not in substitution for, other requirements of these regulations. In particular the provisions of chapter 402–19 WAC apply to applications and licenses subject to this chapter.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–235–001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 79–12–073 (Order 1459), § 402–22–010, filed 11/30/79, effective 1/1/80. Formerly chapter 402–20 WAC.]

WAC 246-235-010 Filing application for specific licenses. (1) Applications for specific licenses shall be filed on department form RHF-1.

- (2) The department may at any time after the filing of the original application, and before the expiration of the license, require further statements in order to enable the department to determine whether the application should be granted or denied or whether a license should be modified or revoked.
- (3) Each application shall be signed by the applicant or licensee or a person duly authorized to act for and on the applicant's behalf.
- (4) An application for a license may include a request for a license authorizing one or more activities.
- (5) In the application, the applicant may incorporate by reference information contained in previous applications, statements, or reports filed with the department provided such references are clear and specific.
- (6) Applications and documents submitted to the department may be made available for public inspection except that the department may withhold any document or part thereof from public inspection if disclosure of its content is not required in the public interest and would adversely affect the interest of a person concerned.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-235-010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 79-12-073 (Order 1459), § 402-22-020, filed 11/30/79, effective 1/1/80. Formerly WAC 402-20-050.]

WAC 246-235-020 General requirements for the issuance of specific licenses. A license application will be approved if the department determines that:

- (1) The applicant is qualified by reason of training and experience to use the material in question for the purpose requested in accordance with these regulations in such a manner as to minimize danger to public health and safety or property;
- (2) The applicant's proposed equipment, facilities, and procedures are adequate to minimize danger to public health and safety or property;
- (3) The issuance of the license will not be inimical to the health and safety of the public; and
- (4) The applicant satisfies any applicable special requirements in WAC 402-22-070, 402-22-090, 402-22-110, and 402-80-060.
- (5) In the case of an application for a license to receive and possess radioactive material for commercial waste disposal by land burial, source material milling, or for the conduct of any other activity which the agency determines will significantly affect the quality of the environment, the department, before commencement of construction of the plant or facility in which the activity will be conducted, has concluded, after independently weighing the environmental, economic, technical and other benefits against environmental costs and considering available alternatives, that the action called for is the issuance of the proposed license, with any appropriate conditions to protect environmental values. Commencement of construction prior to such conclusion shall be grounds for denial of a license to receive and possess radioactive material in such plant or facility. As used in this paragraph the term "commencement of construction" means any clearing of land, excavation, or other substantial action that would adversely affect the environment of a site. The term does not mean site exploration, necessary borings to determine foundation conditions, or other preconstruction monitoring or testing to establish background information related to the suitability of the site or the protection of environmental values.
 - (6) Financial surety arrangements.
- (a) Pursuant to chapter 70.121 RCW, and except as otherwise provided, financial surety arrangements for site reclamation and long-term surveillance and control which may consist of surety bonds, cash deposits, certificates of deposit, deposits of government securities, irrevocable letters or lines of credit, or any combination of the above for source material milling operations shall be established to ensure the protection of the public health and safety in the event of abandonment, default, or other inability of the licensee to meet the requirements of the act and these regulations.
- (i) The amount of funds to be ensured by such surety arrangements shall be based on department-approved cost estimates.
- (ii) Self-insurance, or any arrangement which essentially constitutes self-insurance (e.g., a contract with a state or federal agency), will not satisfy the surety requirement since this provides no additional assurance other than that which already exists through license requirements.

- (b) The arrangements required in (a) of this subsection shall be established prior to commencement of operations to assure that sufficient funds will be available to carry out decontamination and decommissioning of the facility.
- (c) Amendments to licenses in effect on the effective date of this regulation may be issued providing that the required surety arrangements are established within ninety days after the effective date of this subsection.
- (d) For source material milling operations, the amount of funds to be ensured by such surety arrangements shall be based on department-approved cost estimates in an approved plan for (i) decontamination and decommissioning of mill buildings and the milling site to levels which would allow unrestricted use of these areas upon decommissioning, and (ii) the reclamation of tailings and/or waste disposal areas in accordance with the technical criteria delineated in WAC 402-52-100. The license shall submit this plan in conjunction with an environmental report that addresses the expected environof the milling mental impacts operation, decommissioning and tailings reclamation, and evaluates alternatives for mitigating these impacts. In addition, the surety shall cover the payment of the charge for longterm surveillance and control required by the department. In establishing specific surety arrangements, the licensee's cost estimates shall take into account total costs that would be incurred if an independent contractor were hired to perform the decommissioning and reclamation work. In order to avoid unnecessary duplication and expense, the department may accept financial sureties that have been consolidated with financial or surety arrangements established to meet requirements of other federal or state agencies and/or local governing bodies for such decommissioning, decontamination, reclamation, and long-term site surveillance, provided such arrangements are considered adequate to satisfy these requirements and that portion of the surety which covers the decommissioning and reclamation of the mill, mill tailings site and associated areas, and the long-term funding charge are clearly identified. The licensee's surety mechanism will be reviewed annually by the department to assure that sufficient funds will be available for completion of the reclamation plan if the work had to be performed by an independent contractor. The amount of surety liability should be adjusted to recognize any increases or decreases resulting from inflation, changes in engineering plans, activities performed, and any other conditions affecting costs. Regardless of whether reclamation is phased through the life of the operation or takes place at the end of operations, an appropriate portion of surety liability shall be retained until final compliance with the reclamation plan is determined. This will yield a surety that is at least sufficient at all times to cover the costs of decommissioning and reclamation of the areas that are expected to be disturbed before the next license renewal. The term of the surety mechanism must be open ended, unless it can be demonstrated that another arrangement would provide an equivalent level of assurance. This assurance could be provided with a surety instrument which is

written for a specified period of time (e.g., five years) yet which must be automatically renewed unless the surety notifies the beneficiary (the state regulatory agency) and the principal (the licensee) some reasonable time (e.g., ninety days) prior to the renewal date of their intention not to renew. In such a situation the surety requirement still exists and the licensee would be required to submit an acceptable replacement surety within a brief period of time to allow at least sixty days for the department to collect.

(7) Long-term care requirements. Pursuant to chapter 70.121 RCW, and as otherwise provided in WAC 402–22–070 (6)(d), a long-term care trust fund shall be established by source material milling licensees prior to the issuance of the license.

(8) Continued surveillance requirements for source material mills.

- (a) The final disposition of tailings or wastes at source material milling sites should be such that the need for active maintenance is not necessary to preserve isolation. As a minimum, annual site inspections shall be conducted by the government agency retaining ultimate custody of the site where tailings, or wastes are stored to confirm the integrity of the stabilized tailings, or waste systems and to determine the need, if any, for maintenance and/or monitoring and/or environmental sampling. Results of the inspection shall be reported to the United States Nuclear Regulatory Commission within sixty days following each inspection. The United States Nuclear Regulatory Commission may require more frequent site inspections, if, on the basis of a site-specific evaluation, such a need appears necessary due to the features of a particular tailings or waste disposal system.
- (b) A minimum charge of two hundred fifty thousand dollars (1978 United States dollars) accrued as specified in WAC 402-22-070 (6)(d) to cover the costs of longterm surveillance shall be paid by each mill operator to the agency prior to the termination of a uranium or thorium mill license. If site surveillance or control requirements at a particular site are determined, on the basis of a site-specific evaluation, to be significantly greater than those specified in (a) of this subsection (e.g., if fencing is determined to be necessary) variance in funding requirements may be specified by the department. The total charge to cover the costs of long-term surveillance shall be such that, with an assumed one percent annual real interest rate, the collected funds will yield interest in an amount sufficient to cover the annual costs of site surveillance. The charge will be adjusted annually prior to actual payments to recognize inflation. The inflation rate to be used is that indicated by the change in the consumer price index published by the United States Department of Labor, Bureau of Labor Statistics. Contributions by a licensee to the long-term care trust fund pursuant to chapter 70.121 RCW shall be transferred to cover the costs assessed under this criterion.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-235-020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-22-040, filed 12/11/86. Statutory Authority: Chapter 70.121 RCW. 81-

16-031 (Order 1683), \$ 402-22-040, filed 7/28/81. Statutory Authority: RCW 70.98.080. 79-12-073 (Order 1459), \$ 402-22-040, filed 11/30/79, effective 1/1/80. Formerly WAC 402-20-060.]

WAC 246-235-030 Issuance of specific licenses. (1) Upon a determination that an application meets the requirements of the act and the regulations of the department the department will issue a specific license authorizing the proposed activity in such form and containing such conditions and limitations as it deems appropriate or necessary.

- (2) The department may incorporate in any license at the time of issuance, or thereafter by appropriate rule, regulation, or order, such additional requirements and conditions with respect to the licensee's receipt, possession, use, storage, and transfer of radioactive material subject to this part as it deems appropriate or necessary in order to:
- (a) Minimize danger to public health and safety or property;
- (b) Require such reports and the keeping of such records, and to provide for such inspections of activities under the license as may be appropriate or necessary; and
- (c) Prevent loss or theft of material subject to this part.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–235–030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–22–045, filed 12/11/86; 79–12–073 (Order 1459), § 402–22–045, filed 11/30/79, effective 1/1/80. Formerly WAC 402–20–080.]

WAC 246-235-040 Expiration of licenses. Except as provided in WAC 402-22-055(2), each specific license shall expire at the end of the day, in the month and year stated therein.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–235–040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 79–12–073 (Order 1459), § 402–22–050, filed 11/30/79, effective 1/1/80. Formerly WAC 402–20–100.]

- WAC 246-235-050 Renewal of license. (1) Applications for renewal of specific licenses shall be filed in accordance with WAC 402-22-020.
- (2) In any case in which a licensee, not less than thirty days prior to expiration of the existing license, has filed an application in proper form for renewal or for a new license authorizing the same activities, such existing license shall not expire until the application has been finally determined by the department.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–235–050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 79–12–073 (Order 1459), § 402–22–055, filed 11/30/79, effective 1/1/80. Formerly WAC 402–20–110.]

WAC 246-235-060 Amendment of licenses at request of licensee. Applications for amendment of a license shall be filed in accordance with WAC 402-22-020 and shall specify the respects in which the licensee desires the license to be amended and the grounds for such amendment.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–235–060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–22–060, filed 9/16/83; 79–12–073 (Order 1459), § 402–22–060, filed 11/30/79, effective 1/1/80. Formerly WAC 402–20–120.]

WAC 246-235-070 Agency action on applications to renew or amend. In considering an application by a licensee to renew or amend the license, the department will apply the criteria set forth in this chapter, as applicable.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–235–070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–22–065, filed 12/11/86; 79–12–073 (Order 1459), § 402–22–065, filed 11/30/79, effective 1/1/80. Formerly WAC 402–20–130.]

- WAC 246-235-080 Special requirements for issuance of certain specific licenses for radioactive material.

 (1) Human use of radioactive material in institutions. In addition to the requirements set forth in WAC 402-22-040 a specific license for human use of radioactive material in institutions will be issued if:
- (a) The applicant has appointed a radiation safety committee to coordinate the use of radioactive material throughout that institution and to maintain surveillance over the institution's radiation safety program. Membership of the committee should include a specialist (where applicable a physician) from each department where radioactive material is used, a representative of the institution's management, a representative of the nursing staff, and a person trained in radiation safety. The radiation safety committee shall meet at intervals not to exceed six months. Minutes shall be taken and maintained for two years for inspection by the department;
- (b) The applicant possesses adequate facilities for the clinical care of patients. The applicant is advised that construction of new radioisotope facilities and modification of existing facilities must also comply with the requirements of WAC 248-18-665 of the construction review section of the department;
- (c) The physician(s) designated on the application as the individual user(s) has (or have) substantial experience in the handling and administration of radioactive material and, where applicable, the clinical management of radioactive patients; and
- (d) If the application is for a license to use unspecified quantities or multiple types of radioactive material, the applicant's staff has substantial experience in the use of a variety of radioactive materials for a variety of human uses
- (2) Licensing of individual physicians for human use of radioactive material. In addition to the requirements set forth in WAC 402-22-040 a specific license for the human use of radioactive material will be issued to an individual physician if:
- (a) The applicant has access to a hospital possessing adequate facilities to hospitalize and monitor the applicant's radioactive patients whenever it is advisable;
- (b) The applicant has extensive experience in the handling and administration of radioactive material and,

- where applicable, the clinical management of radioactive patients;
- (c) The application is for use in the applicant's practice in an office outside a medical institution; and
- (d) The department will approve an application by an individual physician or group of physicians for a specific license to receive, possess or use radioactive material on the premises of a medical institution only if:
 - (i) The use of radioactive material is limited to the:
- (A) Administration of radiopharmaceuticals for diagnostic or therapeutic purposes;
- (B) Performance of diagnostic studies on patients to whom a radiopharmaceutical has been administered;
 - (C) Performance of in vitro diagnostic studies; or
- (D) Calibration and quality control checks of radioactive assay instrumentation, radiation safety instrumentation and diagnostic instrumentation;
- (ii) The physician brings the radioactive material with him and removes the radioactive material when he departs. (The institution cannot receive, possess or store radioactive material other than the amount of material remaining in the patient); and
- (iii) The medical institution does not hold a radioactive material license issued pursuant to the provisions of subsection (1) of this section.
- (3) Specific licenses for certain groups of medical uses of radioactive material.
- (a) Subject to the provisions of (b), (c) and (d) of this subsection an application for a specific license pursuant to subsection (1), (2) or (4) of this section, or for any medical use or uses of radioactive material specified in one or more of Groups I to VI, inclusive, of WAC 402–22–200, Schedule A, will be approved for all of the uses within the group or groups which include the use or uses specified in the application if:
- (i) The applicant satisfies the requirements of subsection (1), (2) or (4) of this section;
- (ii) The applicant, or the physician designated in the application as the individual user, has adequate clinical experience in the types of uses included in the group or groups;
- (iii) The applicant, or the physicians and all other personnel who will be involved in the preparation and use of the radioactive material, have adequate training and experience in the handling of radioactive material appropriate to their participation in the uses included in the group or groups;
- (iv) The applicant's radiation detection and measuring instrumentation is adequate for conducting the procedures involved in the uses included in the group or groups, specifically:
- (A) For Groups I through V, applicant must possess and use a calibrated and operable low-range survey instrument with a thin window (less than 7 mg/cm²) capable of detecting radiation levels of 0.05 milliroentgen per hour up to at least 20 milliroentgens per hour;
- (B) For Groups III, V, and VI, applicant must possess a calibrated and operable high-range survey instrument capable of detecting radiation levels up to at least one Roentgen per hour;

- (v) The applicant's radiation safety operating procedures are adequate for handling and disposal of the radioactive material involved in the uses included in the group or groups.
- (b) Any licensee or registrant who is authorized to use radioactive material pursuant to one or more groups in (a) of this subsection and WAC 402-22-200, Schedule A, is subject to the following conditions:
- (i) For Groups I, II, IV, and V, no licensee or registrant shall receive, possess or use radioactive material except as a radiopharmaceutical manufactured in the form to be administered to the patient, labeled, packaged and distributed in accordance with a specific license issued by the department pursuant to WAC 402–22–110(10), a specific license issued by the United States Nuclear Regulatory Commission pursuant to Section 32.72 of 10 CFR Part 32, or a specific license issued by an agreement state or a licensing state pursuant to equivalent regulations.
- (ii) For Group III, no licensee or registrant shall receive, possess or use generators or reagent kits containing radioactive material or shall use reagent kits that do not contain radioactive material to prepare radiopharmaceuticals containing radioactive material, except:
- (A) Reagent kits not containing radioactive material that are approved by the department, the United States Nuclear Regulatory Commission, an agreement state or a licensing state for use by persons licensed pursuant to this subsection and WAC 402–22–200, Schedule A, or equivalent regulations; or
- (B) Generators or reagent kits containing radioactive material that are manufactured, labeled, packaged and distributed in accordance with a specific license issued by the department pursuant to WAC 402–22–110(11), a specific license issued by the United States Nuclear Regulatory Commission pursuant to Section 32.73 of 10 CFR Part 32, or a specific license issued by an agreement state or a licensing state pursuant to equivalent regulations.
- (iii) For Group VI, no licensee or registrant shall receive, possess or use radioactive material except as contained in a source or device that has been manufactured, labeled, packaged and distributed in accordance with a specific license issued by the department pursuant to WAC 402–22–110(12), a specific license issued by the United States Nuclear Regulatory Commission pursuant to Section 32.74 of 10 CFR Part 32, or a specific license issued to the manufacturer by an agreement state or a licensing state pursuant to equivalent regulations.
- (iv) For Group III, any licensee or registrant who uses generators or reagent kits shall elute the generator or process radioactive material with the reagent kit in accordance with instructions which are approved by the department, the United States Nuclear Regulatory Commission, an agreement state or a licensing state and are furnished by the manufacturer on the label attached to or in the leaflet or brochure which accompanies the generator or reagent kit.
- (v) For Groups I, II and III any licensee using byproduct material for clinical procedures other than those

- specified in the product labeling (package insert) shall comply with the product labeling regarding:
 - (A) Chemical and physical form;
 - (B) Route of administration; and
 - (C) Dosage range.
- (c) Any licensee who is licensed pursuant to (a) of this subsection for one or more of the medical use groups in WAC 402-22-200, Schedule A, also is authorized, subject to the provisions of (c) and (d) of this subsection to receive, possess and use for calibration and reference standards:
- (i) Any radioactive material authorized for use in IND/NDA products under Group I, Group II, or Group III of WAC 402–22–200, Schedule A, with a half-life not longer than one hundred days, in amounts not to exceed 15 millicuries total;
- (ii) Any radioactive material authorized for use in IND/NDA products under Group I, Group II, or Group III of WAC 402-22-200, Schedule A, with half-life greater than one hundred days in amounts not to exceed 200 microcuries total;
- (iii) Technetium-99m in amounts not to exceed 30 millicuries:
- (iv) Any radioactive material excluding Radium-226, in amounts not to exceed three millicuries per source (except Cobalt-57, which may be possessed in amounts not to exceed 5.5 millicuries), contained in calibration or reference sources that have been manufactured, labeled, packaged, and distributed in accordance with a specific license issued by the department pursuant to WAC 402-22-110(11), a specific license issued by the United States Nuclear Regulatory Commission pursuant to Section 32.74 of 10 CFR Part 32, or a specific license issued to the manufacturer by an agreement state or a licensing state pursuant to equivalent regulations.
 - (d) Leak tests.
- (i) Any licensee or registrant who possesses sealed sources as calibration or reference sources pursuant to (c) of this subsection shall cause each sealed source containing radioactive material, other than Hydrogen-3, with a half-life greater than thirty days in any form other than gas to be tested for leakage and/or contamination at intervals not to exceed six months. In the absence of a certificate from a transferor indicating that a test has been made within six months prior to the transfer, the sealed sources shall not be used until tested: *Provided*, *however*, That no leak tests are required when:
- (A) The source contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material;
- (B) The sealed source is stored and is not being used: *Provided*, That a physical inventory of the source and wipe surveys of the storage area or storage container are conducted.
- (ii) The leak test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is mounted or stored on which contamination might be expected to accumulate. Records of

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leak test results shall be kept in units of microcuries and maintained for inspection by the department.

- (iii) If the leak test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee or registrant shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with chapters 402–22 and 402–24 WAC. A report shall be filed within five days of the test with the department describing the equipment involved, the test results, and the corrective action taken.
- (e) Any licensee or registrant who possesses and uses calibration and reference sources pursuant to (c)(iv) of this subsection shall:
- (i) Follow the radiation safety and handling instructions approved by the department, the United States Nuclear Regulatory Commission, an agreement state or a licensing state and furnished by the manufacturer on the label attached to the source, or permanent container thereof, or in the leaflet or brochure that accompanies the source, and maintain such instruction in a legible and conveniently available form; and
- (ii) Conduct a quarterly physical inventory to account for all sources received and possessed. Records of the inventories shall be maintained for inspection by the department and shall include at a minimum the quantities and kinds of radioactive material, location of sources, name of person performing the inventory, and the date of the inventory.
- (4) Human use of sealed sources. In addition to the requirements set forth in WAC 402-22-040, a specific license for human use of sealed sources will be issued only if the applicant or, if the application is made by an institution, the individual user:
- (a) Has specialized training in the diagnostic or therapeutic use of the sealed source considered, or has experience equivalent to such training; and
 - (b) Is a physician.
- (5) Use of sealed sources in industrial radiography. In addition to the requirements set forth in WAC 402-22-040, a specific license for use of sealed sources in industrial radiography will be issued if:
- (a) The applicant will have an adequate program for training radiographers and radiographer's assistants and submits to the department a schedule or description of such program which specifies the:
 - (i) Initial training;
 - (ii) Periodic training;
 - (iii) On-the-job training;
- (iv) Means to be used by the licensee to determine the radiographer's knowledge and understanding of and ability to comply with department regulations and licensing requirements, and the operating and emergency procedures of the applicant; and
- (v) Means to be used by the licensee to determine the radiographer's assistant's knowledge and understanding of and ability to comply with the operating and emergency procedures of the applicant;
- (b) The applicant submits to the department and complies with satisfactory written operating and emergency procedures (described in WAC 402-36-110);

- (c) The applicant will have a quarterly internal inspection system, to assure that license provisions, regulations, and the applicant's operating and emergency procedures are followed by radiographers and radiographer's assistants. Records of this management control program shall be maintained for two years;
- (d) The applicant submits to the department a description of the applicant's overall organizational structure pertaining to the industrial radiography program, including specified delegations of authority and responsibility for operation of the program;
- (e) The applicant who desires to conduct leak tests has established adequate procedures to be followed in leak testing sealed sources for possible leakage and contamination and submits to the department a description of such procedures including:
 - (i) Instrumentation to be used;
- (ii) Method of performing tests, e.g., points on equipment to be smeared and method of taking smear; and
- (iii) Pertinent experience of the person who will perform the tests;
- (f) The licensee shall conduct a program for inspection and maintenance of radiographic exposure devices and storage containers to assure proper functioning of components important to safety.
- (6) Environmentally significant licensing actions. In addition to the requirements set forth in WAC 402-22-040, a specific license for any activity within the licensing authority of the department which the department determines will significantly affect the radiological quality of the human environment, including those specified in WAC 197-10-175 (7)(a) (i.e., licenses to operate low level waste burial facilities or licenses to operate or expand beyond the design capacity, mineral processing facilities or their tailings areas, whose products, or byproducts, have concentrations of naturally occurring radioactive material in excess of exempt concentrations as specified in WAC 402-19-580, Schedule C), will be issued if the following conditions are met:
 - (a) Environmental impact statement.
- (i) The application for a license or license amendment (other than administrative amendments) is accompanied or preceded by a final environmental impact statement or final declaration of nonsignificance completed in accordance with the State Environmental Policy Act (SEPA) procedures and guidelines specified in chapters 197–11 and 248–06 WAC. For any uranium or thorium mill in operation on or before the effective date of this regulation for which an environmental impact statement has not been prepared previously, an application for license renewal must be accompanied or preceded by a final environmental impact statement or final declaration of nonsignificance completed in accordance with SEPA guidelines.

Note: No construction shall be commenced until the license has been issued or unless an emergency exemption from SEPA requirements is granted in accordance with WAC 197-10-180. For the purposes of this subsection, the term "commencement of construction" means any clearing of land, excavation or other substantial action related to a proposed activity for specific licensing that would adversely affect the natural environment of a site; this term does not include changes desirable for the

temporary use of the land for public recreational use, limited borings to determine site characteristics as necessary for environmental assessment, or other preconstruction monitoring to establish background information related to suitability of a site or to the protection of environmental values. In the case where an exemption is granted, the applicant shall assume all financial risk for construction activity; waive any claim of entitlement to the issuance of a license based solely upon the grant of the exemption or the commencement of construction pursuant thereto; and furnish, if the circumstances warrant and the department so requires, a financial surety arrangement to insure the protection of the public health, safety and the environment in the event of abandonment, default, or inability of the license applicant to meet the requirements of the act or these regulations.

- (ii) In addition to the information required in chapter 197-11 WAC, the following additional areas shall be addressed in the final environmental impact statement:
- (A) Alternative sites to those chosen by the applicant shall include all alternative sites, whether or not those sites are under the control or ownership of the applicant.
- (B) Long term impacts shall include, but not be limited to, decommissioning, decontamination, reclamation impacts and material management associated with the proposed activities.
- (C) Environmental reviews, dose assessments, ecology, construction effects on biota, impact on the environment from the use of chemicals, and socioeconomic effects shall be addressed.
- (D) Alternative disposal sites and techniques for disposal shall be evaluated to determine if a site or technique is clearly superior.
- (b) For uranium or thorium milling operations, a bond made payable to the department of social and health services or other acceptable government agency, and in an amount specified by the department, shall be posted to ensure the protection of the public health and safety in the event of abandonment, default or other inability of the licensee to meet the requirements for reclamation and disposal of tailings decommissioning the site. The bond, or a copy thereof when the bond is made payable to another government agency, shall be received by the department prior to issuance of the license, or prior to license renewal for mills in operation on or before the effective date of this regulation. Other acceptable surety arrangements in addition to surety bonding include cash deposits, certificates of deposit, deposits of government securities, letters or lines of credit or combinations of the foregoing. The amount and mechanism of the surety arrangement may be reviewed by the department preceding each license renewal and adjustments may be required of the licensee prior to such renewal.
- (c) The owner of the proposed uranium or thorium mill and tailings site(s) agrees to transfer or revert to the appropriate state or federal agency upon termination of the license, all lands, buildings and grounds, and any interest therein, necessary to fulfill the purposes of this subsection, except where the lands are held in trust for, or are owned by any Indian tribe. For any uranium or thorium mill in operation on or before the effective date of this regulation, such an agreement will be required prior to license renewal.

- (d) For all uranium and thorium milling operations, the owner or operator shall arrange to pay to the department or its designee on a quarterly basis a charge on each kilogram of uranium or thorium compound which is milled out of the raw ore on or after January 1, 1980.
- (i) The specific charge shall be twenty cents per kilogram on each kilogram of uranium or thorium compound milled out of the raw ore.
- (ii) The specific charge may be increased or decreased as is considered necessary to provide a special security fund for the further maintenance, surveillance or care which may be required after a licensee has ceased to operate.
- (iii) The total charge shall not exceed one million dollars.
- (iv) A minimum fund of two hundred fifty thousand dollars shall be provided by the licensee payable to the state. If a shortfall exists between the amount of money in the special security fund and the two hundred fifty thousand dollars minimum amount, a surety bond, or other acceptable surety instrument as defined above shall be arranged.
- (e) The application for a license includes a description of an appropriate program for effluent monitoring, environmental monitoring and data reporting. Such description shall encompass locations, frequency, and types of sampling, analytical plans and procedures, minimum detection levels, sampling equipment and quality assurance programs.
- (f) All licensees or registrants required to meet the additional requirements set forth in this subsection shall establish environmental monitoring programs adequate to determine the impact of their activity on the natural environment around the site of their environmentally significant activity. The established environmental and effluent monitoring program shall address all environmentally significant radionuclide releases and external radiation sources caused or threatened to be caused by the licensee's activities.
- (i) Effluent and environmental monitoring results shall include the following minimum information as pertinent:
- (A) Information as to flow rates, total volume of effluent, peak concentration, concentration of each radionuclide in the effluent averaged over a period of one year at the point where the effluent leaves a stack, tube, pipe, or similar conduit;
- (B) A description of the properties of the effluents, including:
 - (I) Chemical composition;
- (II) Physical characteristics, including suspended solids content in liquid effluents, and nature of gas aerosol for air effluents;
- (III) The hydrogen ion concentrations (pH) of liquid effluents; and
- (IV) The size range of particulates in effluent released into air;
- (C) A description of the anticipated human occupancy in the unrestricted area where the highest concentration of radioactive material from the effluent is expected, and, in the case of a river stream a description of water

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uses downstream from the point of release of the effluent.

- (D) Information as to the highest concentration of each radionuclide in an unrestricted area, including anticipated concentrations averaged over a period of one year:
 - (I) In air at any point of human occupancy; or
- (II) In water at points of use downstream from the point of release of the effluent;
- (E) The background concentration of radionuclides in the receiving river or stream prior to the release of liquid effluent;
- (F) A description of the waste treatment facilities and procedures used to reduce the concentration of radionuclides in effluents prior to their release;
- (G) A written description of sampling techniques and sample analysis methods;
- (H) A written description of how all calculated results were obtained from sample analysis data. This explanation shall include example calculations and estimates of the precision and sensitivity of monitoring results;
- (I) A written description of the licensee's quality control program including specification of control samples and standard samples used.
- (ii) The licensee shall submit in writing to the department within sixty days after January 1 and July 1 of each year, reports specifying the quantities of each of the principle radionuclides released to unrestricted areas in liquid and in gaseous effluent during the previous six months of operations. This data shall be reported in a manner that will permit the department to confirm the potential annual radiation doses to the public. All data from the radiological and nonradiological environmental monitoring program will also be submitted for the same time period and frequency as specified above. The data shall be reported in a manner which will allow the department to confirm the potential annual radiation doses to the public.
- (g) For land disposal of radioactive material, the provisions of chapter 402-61 WAC must also be met.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–235–080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–22–070, filed 12/11/86; 83–19–050 (Order 2026), § 402–22–070, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–22–070, filed 12/8/80. Statutory Authority: RCW 70.98.080. 79–12–073 (Order 1459), § 402–22–070, filed 11/30/79, effective 1/1/80. Formerly WAC 402–20–070.]

WAC 246-235-090 Special requirements for specific licenses of broad scope. This section prescribes requirements for the issuance of specific licenses of broad scope for radioactive material ("broad licenses") and certain regulations governing holders of such licenses.*

*Note: Authority to transfer possession or control by the manufacturer, processor, or producer of any equipment, device, commodity or other product containing source material or byproduct material whose subsequent possession, use, transfer and disposal by all other persons who are exempted from regulatory requirements may be obtained only from the United States Nuclear Regulatory Commission, Washington, D.C. 20555.

- (1) The different types of broad licenses are set forth below:
- (a) A "Type A specific license of broad scope" is a specific license authorizing receipt, acquisition, ownership, possession, use and transfer of any chemical or physical form of the radioactive material specified in the license, but not exceeding quantities specified in the license, for any authorized purpose. The quantities specified are usually in the multicurie range.
- (b) A "Type B specific license of broad scope" is a specific license authorizing receipt, acquisition, ownership, possession, use and transfer of any chemical or physical form of radioactive material specified in WAC 402-22-250 Schedule B, for any authorized purpose. The possession limit for a Type B broad license, if only one radionuclide is possessed thereunder, is the quantity specified for that radionuclide in WAC 402-22-250 Schedule B, Column I. If two or more radionuclides are possessed thereunder, the possession limit for each is determined as follows: For each radionuclide, determine the ratio of the quantity possessed to the applicable quantity specified in WAC 402-22-250 Schedule B, Column I, for that radionuclide. The sum of the ratios for all radionuclides possessed under the license shall not exceed unity.
- (c) A "Type C specific license of broad scope" is a specific license authorizing receipt, acquisition, ownership, possession, use and transfer of any chemical or physical form of radioactive material specified in WAC 402-22-250 Schedule B, for any authorized purpose. The possession limit for a Type C broad license, if only one radionuclide is possessed thereunder, is the quantity specified for that radionuclide in WAC 402-22-250 Schedule B, Column II. If two or more radionuclides are possessed thereunder, the possession limit is determined for each as follows: For each radionuclide determine the ratio of the quantity possessed to the applicable quantity specified in WAC 402-22-250 Schedule B, Column II, for that radionuclide. The sum of the ratios for all radionuclides possessed under the license shall not exceed unity.
- (2) An application for a Type A specific license of broad scope will be approved if:
- (a) The applicant satisfies the general requirements specified in WAC 402-22-040.
- (b) The applicant has engaged in a reasonable number of activities involving the use of radioactive material; and
- (c) The applicant has established administrative controls and provisions relating to organization and management, procedures, recordkeeping, material control and accounting, and management review that are necessary to assure safe operations, including:
- (i) The establishment of a radiation safety committee composed of such persons as a radiation safety officer, a representative of management, and persons trained and experienced in the safe use of radioactive material;
- (ii) The appointment of a radiation safety officer who is qualified by training and experience in radiation protection, and who is available for advice and assistance on radiation safety matters; and

- (iii) The establishment of appropriate administrative procedures to assure:
- (A) Control of procurement and use of radioactive material:
- (B) Completion of safety evaluation of proposed uses of radioactive material which take into consideration such matters as the adequacy of facilities and equipment, training and experience of the user, and the operating or handling procedures; and
- (C) Review, approval, and recording by the radiation safety committee of safety evaluation of proposed uses prepared in accordance with item (2)(c)(iii)(B) of this section prior to use of the radioactive material.
- (3) An application for a Type B specific license of broad scope will be approved if:
- (a) The applicant satisfies the general requirements specified in WAC 402-22-040; and
- (b) The applicant has established administrative controls and provisions relating to organization and management, procedures, recordkeeping, material control and accounting, and management review that are necessary to assure safe operations, including:
- (i) The appointment of a radiation safety officer who is qualified by training and experience in radiation protection, and who is available for advice and assistance on radiation safety matters; and
- (ii) The establishment of appropriate administrative procedures to assure:
- (A) Control of procurement and use of radioactive material;
- (B) Completion of safety evaluations of proposed uses of radioactive material which take into consideration such matters as the adequacy of facilities and equipment, training and experience of the user, and the operating or handling procedures; and
- (C) Review, approval, and recording by the radiation safety officer of safety evaluations of proposed uses prepared in accordance with item (3)(b)(ii)(B) of this section prior to use of the radioactive material.
- (4) An application for a Type C specific license of broad scope will be approved if:
- (a) The applicant satisfies the general requirements specified in WAC 402-22-040.
- (b) The applicant submits a statement that radioactive material will be used only by, or under the direct supervision of individuals, who have received:
- (i) A college degree at the bachelor level, or equivalent training and experience, in the physical or biological sciences or in engineering; and
- (ii) At least forty hours of training and experience in the safe handling of radioactive material, and in the characteristics of ionizing radiation, units of radiation dose and quantities, radiation detection instrumentation, and biological hazards of exposure to radiation appropriate to the type and forms of radioactive material to be used; and
- (c) The applicant has established administrative controls and provisions relating to procurement of radioactive material, procedures, recordkeeping, material control and accounting, and management review necessary to assure safe operations.

- (5) Specific licenses of broad scope are subject to the following conditions:
- (a) Unless specifically authorized by the department, persons licensed pursuant to this section shall not:
- (i) Conduct tracer studies in the environment involving direct release of radioactive material;
- (ii) Receive, acquire, own, possess, use or transfer devices containing 100,000 curies or more of radioactive material in sealed sources used for irradiation of materials;
- (iii) Conduct activities for which a specific license issued by the department under WAC 402-22-070 or 402-22-110 is required; or
- (iv) Add or cause the addition of radioactive material to any food, beverage, cosmetic, drug or other product designed for ingestion or inhalation by, or application to, a human being.
- (b) Each Type A specific license of broad scope issued under this part shall be subject to the condition that radioactive material possessed under the license may only be used by, or under the direct supervision of, individuals approved by the licensee's radiation safety committee.
- (c) Each Type B specific license of broad scope issued under this part shall be subject to the condition that radioactive material possessed under the license may only be used by, or under the direct supervision of, individuals approved by the licensee's radiation safety officer.
- (d) Each Type C specific license of broad scope issued under this part shall be subject to the condition that radioactive material possessed under the license may only be used by, or under the direct supervision of, individuals who satisfy the requirements of subsection (4) of this section.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–235–090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 79–12–073 (Order 1459), § 402–22–090, filed 11/30/79, effective 1/1/80. Formerly WAC 402–20–073.]

- WAC 246-235-100 Special requirements for a specific license to manufacture, assemble, repair, or distribute commodities, products, or devices which contain radioactive material. (1) Licensing the introduction of radioactive material into products in exempt concentrations. In addition to the requirements set forth in WAC 402-22-040, a specific license authorizing the introduction of radioactive material into a product or material owned by or in the possession of the licensee or another to be transferred to persons exempt under WAC 402-19-190 (2)(a) will be issued if:
- (a) The applicant submits a description of the product or material into which the radioactive material will be introduced, intended use of the radioactive material and the product or material into which it is introduced, method of introduction, initial concentration of the radioactive material in the product or material, control methods to assure that no more than the specified concentration is introduced into the product or material, estimated time interval between introduction and transfer of the product or material, and estimated concentration

of the radioactive material in the product or material at the time of transfer; and

- (b) The applicant provides reasonable assurance that the concentrations of radioactive material at the time of transfer will not exceed the concentrations in WAC 402–19–580, Schedule C, that reconstruction of the radioactive material in concentrations exceeding those in WAC 402–19–580, Schedule C, is not likely, that use of lower concentrations is not feasible, and that the product or material is not likely to be incorporated in any food, beverage, cosmetic, drug or other commodity or product designed for ingestion or inhalation by, or application to a human being.
- (c) Each person licensed under subsection (1) of this section shall file an annual report with the department which shall identify the type and quantity of each product or material into which radioactive material has been introduced during the reporting period; name and address of the person who owned or possessed the product and material, into which radioactive material has been introduced, at the time of introduction; the type and quantity of radionuclide introduced into each such product or material; and the initial concentrations of the radionuclide in the product or material at time of transfer of the radioactive material by the licensee. If no transfers of radioactive material have been made pursuant to subsection (1) of this section during the reporting period, the report shall so indicate. The report shall cover the year ending June 30, and shall be filed within thirty days thereafter.
- (2) Licensing the distribution of radioactive material in exempt quantities.*
- *Note: Authority to transfer possession or control by the manufacturer, processor or producer of any equipment, device, commodity or other product containing source material or byproduct material whose subsequent possession, use, transfer and disposal by all other persons who are exempted from regulatory requirements may be obtained only from the United States Nuclear Regulatory Commission, Washington, D.C. 20555.
- (a) An application for a specific license to distribute naturally occurring and accelerator-produced radioactive material (NARM) to persons exempted from these regulations pursuant to WAC 402-19-190 (2)(b) will be approved if:
- (i) The radioactive material is not contained in any food, beverage, cosmetic, drug or other commodity designed for ingestion or inhalation by, or application to, a human being;
- (ii) The radioactive material is in the form of processed chemical elements, compounds, or mixtures, tissue samples, bioassay samples, counting standards, plated or encapsulated sources, or similar substances, identified as radioactive and to be used for its radioactive properties, but is not incorporated into any manufactured or assembled commodity, product, or device intended for commercial distribution; and
- (iii) The applicant submits copies of prototype labels and brochures and the department approves such labels and brochures.
- (b) The license issued under paragraph (2)(a) of this section is subject to the following conditions:

- (i) No more than ten exempt quantities shall be sold or transferred in any single transaction. However, an exempt quantity may be composed of fractional parts of one or more of the exempt quantity provided the sum of the fractions shall not exceed unity.
- (ii) Each exempt quantity shall be separately and individually packaged. No more than ten such packaged exempt quantities shall be contained in any outer package for transfer to persons exempt pursuant to WAC 402-19-190 (2)(b). The outer package shall be such that the dose rate at the external surface of the package does not exceed 0.5 millirem per hour.
- (iii) The immediate container of each quantity or separately packaged fractional quantity of radioactive material shall bear a durable, legible label which:
- (A) Identifies the radionuclide and the quantity of radioactivity; and
 - (B) Bears the words "radioactive material."
- (iv) In addition to the labeling information required by item (2)(b)(iii) of this section, the label affixed to the immediate container, or an accompanying brochure, shall:
- (A) State that the contents are exempt from licensing state requirements;
- (B) Bear the words "Radioactive material—Not for human use—Introduction into foods, beverages, cosmetics, drugs, or medicinals, or into products manufactured for commercial distribution is prohibited—Exempt quantities should not be combined"; and
- (C) Set forth appropriate additional radiation safety precautions and instructions relating to the handling, use, storage and disposal of the radioactive material.
- (c) Each person licensed under paragraph (2)(a) of this section shall maintain records identifying, by name and address, each person to whom radioactive material is transferred for use under WAC 402–19–190 (2)(b) or the equivalent regulations of a licensing state, and stating the kinds and quantities of radioactive material transferred. An annual summary report stating the total quantity of each radionuclide transferred under the specific license shall be filed with the department. Each report shall cover the year ending June 30, and shall be filed within thirty days thereafter. If no transfers of radioactive material have been made pursuant to subsection (2) of this section during the reporting period, the report shall so indicate.
- (3) Licensing the incorporation of naturally occurring and accelerator-produced radioactive material into gas and aerosol detectors. An application for a specific license authorizing the incorporation of NARM into gas and aerosol detectors to be distributed to persons exempt under WAC 402-19-190 (2)(c)(iii) will be approved if the application satisfies requirements equivalent to those contained in Section 32.26 of 10 CFR Part 32.
- (4) Licensing the manufacture and distribution of devices to person generally licensed under WAC 402-21-050(4).
- (a) An application for a specific license to manufacture or distribute devices containing radioactive material, excluding special nuclear material, to persons

generally licensed under WAC 402-21-050(4) or equivalent regulations of the United States Nuclear Regulatory Commission, an agreement state or a licensing state will be approved if:

- (i) The applicant satisfies the general requirements of WAC 402-22-040;
- (ii) The applicant submits sufficient information relating to the design, manufacture, prototype testing, quality control, labels, proposed uses, installation, servicing, leak testing, operating and safety instructions, and potential hazards of the device to provide reasonable assurance that:
- (A) The device can be safely operated by persons not having training in radiological protection;
- (B) Under ordinary conditions of handling, storage and use of the device, the radioactive material contained in the device will not be released or inadvertently removed from the device, and it is unlikely that any person will receive in any period of one calendar quarter a dose in excess of ten percent of the limits specified in the table in WAC 402-24-020(1); and
- (C) Under accident conditions (such as fire and explosion) associated with handling, storage and use of the device, it is unlikely that any person would receive an external radiation dose or dose commitment in excess of the following organ doses:

Whole body; head and trunk; active blood-forming organs; gonads; or lens of eye 15 rems

Hands and forearms; feet and ankles; localized areas of skin averaged over areas no larger than one square centimeter 200 rems

Other organs

50 rems

- (iii) Each device bears a durable, legible, clearly visible label or labels approved by the department, which contain in a clearly identified and separate statement:
- (A) Instructions and precautions necessary to assure safe installation, operation and servicing of the device (documents such as operating and service manuals may be identified in the label and used to provide this information);
- (B) The requirement, or lack of requirement, for leak testing, or for testing any on-off mechanism and indicator, including the maximum time interval for such testing, and the identification of radioactive material by isotope, quantity of radioactivity, and date of determination of the quantity; and
- (C) The information called for in one of the following statements, as appropriate, in the same or substantially similar form:
- (aa) The receipt, possession, use and transfer of this device, Model _____, Serial No. ______Note*, are subject to a general license or the equivalent, and the regulations of the United States Nuclear Regulatory Commission or a state with which the United States Nuclear Regulatory Commission has entered into an agreement for the exercise of regulatory authority. This label shall be maintained on the device in a legible condition. Removal of this label is prohibited.

CAUTION - RADIOACTIVE MATERIAL

(Name of manufacturer or distributor)*

(bb) The receipt, possession, use and transfer of this device, Model _____, Serial No. _____Note*, are subject to a general license or the equivalent, and the regulations of a licensing state. This label shall be maintained on the device in a legible condition. Removal of this label is prohibited.

CAUTION - RADIOACTIVE MATERIAL

(Name of manufacturer of distributor)*

*Note: The model, serial number, and name of the manufacturer or distributor may be omitted from this label provided the information is elsewhere specified in labeling affixed to the device.

- (b) In the event the applicant desires that the device be required to be tested at intervals longer than six months, either for proper operation of the on-off mechanism and indicator, if any, or for leakage of radioactive material or for both, he shall include in his application sufficient information to demonstrate that such longer interval is justified by performance characteristics of the device or similar devices and by design features which have a significant bearing on the probability or consequences of leakage of radioactive material from the device or failure of the on-off mechanism and indicator. In determining the acceptable interval for the test for leakage of radioactive material, the department will consider information which includes, but is not limited to:
 - (i) Primary containment (source capsule);
 - (ii) Protection of primary containment;
 - (iii) Method of sealing containment;
 - (iv) Containment construction materials;
 - (v) Form of contained radioactive material;
- (vi) Maximum temperature withstood during prototype tests;
- (vii) Maximum pressure withstood during prototype tests;
- (viii) Maximum quantity of contained radioactive material;
- (ix) Radiotoxicity of contained radioactive material; and
- (x) Operating experience with identical devices or similarly designed and constructed devices.
- (c) In the event the applicant desires that the general licensee under WAC 402-21-050(4), or under equivalent regulations of the United States Nuclear Regulatory Commission, an agreement state or a licensing state be authorized to install the device, collect the sample to be analyzed by a specific licensee for leakage of radioactive material, service the device, test the on-off mechanism and indicator, or remove the device from installation, he shall include in his application written instructions to be followed by the general licensee, estimated calendar quarter doses associated with such activity or activities, and bases for such estimates. The submitted information shall demonstrate that performance of such activity or

activities by an individual untrained in radiological protection, in addition to other handling, storage, and use of devices under the general license, is unlikely to cause that individual to receive a calendar quarter dose in excess of ten percent of the limits specified in the table in WAC 402-24-020(1).

- (d) Each person licensed under paragraph (4)(a) of this section to distribute devices to generally licensed persons shall:
- (i) Furnish a copy of the general license contained in WAC 402-21-050(4) to each person to whom the person directly or through an intermediate person transfers radioactive material in a device for use pursuant to the general license contained in WAC 402-21-050(4);
- (ii) Furnish a copy of the general license contained in the United States Nuclear Regulatory Commission's, agreement state's, or licensing state's regulation equivalent to WAC 402-21-050(4), or alternatively, furnish a copy of the general license contained in WAC 402-21-050(4) to each person to whom he directly or through an intermediate person transfers radioactive material in a device for use pursuant to the general license of the United States Nuclear Regulatory Commission, the agreement state or the licensing state. If a copy of the general license in WAC 402-21-050(4) is furnished to such a person, it shall be accompanied by a note explaining that the use of the device is regulated by the United States Nuclear Regulatory Commission, agreement state or licensing state under requirements substantially the same as those in WAC 402-21-050(4);
- (iii) Report to the department all transfers of such devices to persons for use under the general license in WAC 402-21-050(4). Such report shall identify each general licensee by name and address, an individual by name and/or position who may constitute a point of contact between the department and the general licensee, the type and model number of device transferred, and the quantity and type of radioactive material contained in the device. If one or more intermediate persons will temporarily possess the device at the intended place of use prior to its possession by the user, the report shall include identification of each intermediate person by name, address, contact, and relationship to the intended user. If no transfers have been made to persons generally licensed under WAC 402-21-050(4) during the reporting period, the report shall so indicate. The report shall cover each calendar quarter and shall be filed within thirty days thereafter.
 - (iv) Reports to other departments.
- (A) Report to the United States Nuclear Regulatory Commission all transfers of such devices to persons for use under the United States Nuclear Regulatory Commission general license in Section 31.5 of 10 CFR Part 31.
- (B) Report to the responsible department all transfers of devices manufactured and distributed pursuant to subsection (4) of this section for use under a general license in that state's regulations equivalent to WAC 402–21–050(4).

- (C) Such reports shall identify each general licensee by name and address, an individual by name and/or position who may constitute a point of contact between the department and the general licensee, the type and model of the device transferred, and the quantity and type of radioactive material contained in the device. If one or more intermediate persons will temporarily possess the device at the intended place of use prior to its possession by the user, the report shall include identification of each intermediate person by name, address, contact, and relationship to the intended user. The report shall be submitted within thirty days after the end of each calendar quarter in which such a device is transferred to the generally licensed person.
- (D) If no transfers have been made to United States Nuclear Regulatory Commission licensees during the reporting period, this information shall be reported to the United States Nuclear Regulatory Commission.
- (E) If no transfers have been made to general licensees within a particular state during the reporting period, this information shall be reported to the responsible department upon request of the department.
- (v) Keep records showing the name, address and the point of contact for each general licensee to whom the person directly or through an intermediate person transfers radioactive material in devices for use pursuant to the general license provided in WAC 402-21-050(4), or equivalent regulations of the United States Nuclear Regulatory Commission, an agreement state or a licensing state. The records shall show the date of each transfer, the radionuclide and the quantity of radioactivity in each device transferred, the identity of any intermediate person, and compliance with the report requirements of paragraph (4)(d) of this section.
- (5) Special requirements for the manufacture, assembly or repair of luminous safety devices for use in aircraft. An application for a specific license to manufacture, assemble or repair luminous safety devices containing tritium or promethium-147 for use in aircraft for distribution to persons generally licensed under WAC 402-21-050(5) will be approved subject to the following conditions:
- (a) The applicant satisfies the general requirements specified in WAC 402-22-040; and
- (b) The applicant satisfies the requirements of Sections 32.53, 32.54, 32.55, 32.56, 32.101 of 10 CFR Part 32 or their equivalent.
- (6) Special requirements for license to manufacture calibration sources containing americium—241, plutonium or radium—226 for distribution to persons generally licensed under WAC 402–21–050(7). An application for a specific license to manufacture calibration and reference sources containing americium—241, plutonium or radium—226 to persons generally licensed under WAC 402–21–050(7) will be approved subject to the following conditions:
- (a) The applicant satisfies the general requirement of WAC 402-22-040; and
- (b) The applicant satisfies the requirements of Sections 32.57, 32.58, 32.59, 32.102 of 10 CFR Part 32 and Section 70.39 of 10 CFR Part 70 or their equivalent.

- (7) Manufacture and distribution of radioactive material for certain in vitro clinical or laboratory testing under general license. An application for a specific license to manufacture or distribute radioactive material for use under the general license of WAC 402-21-050(8) will be approved if:
- (a) The applicant satisfies the general requirements specified in WAC 402-22-040;
- (b) The radioactive material is to be prepared for distribution in prepackaged units of:
- (i) Iodine-125 in units not exceeding 10 microcuries each;
- (ii) Iodine-131 in units not exceeding 10 microcuries each;
- (iii) Carbon-14 in units not exceeding 10 microcuries each;
- (iv) Hydrogen-3 (tritium) in units not exceeding 50 microcuries each;
- (v) Iron-59 in units not exceeding 20 microcuries each;
- (vi) Cobalt-57 in units not exceeding 10 microcuries each;
- (vii) Selenium-75 in units not exceeding 10 microcuries each;
- (viii) Mock Iodine-125 in units not exceeding 0.05 microcurie of iodine-129 and 0.005 microcurie of americium-241 each.
- (c) Each prepackaged unit bears a durable, clearly visible label:
- (i) Identifying the radioactive contents as to chemical form and radionuclide, and indicating that the amount of radioactivity does not exceed 10 microcuries of iodine-125, iodine-131, carbon-14, cobalt-57, or selenium-75; 50 microcuries of hydrogen-3 (tritium); 20 microcuries of iron-59; or Mock Iodine-125 in units not exceeding 0.05 microcurie of iodine-129 and 0.005 microcurie of americium-241 each; and
- (ii) Displaying the radiation caution symbol described in WAC 402-24-090 (1)(a) and the words, "CAUTION, RADIOACTIVE MATERIAL," and "Not for internal or external use in humans or animals."
- (d) One of the following statements, as appropriate, or a substantially similar statement which contains the information called for in one of the following statements, appears on a label affixed to each prepackaged unit or appears in a leaflet or brochure which accompanies the package:
- (i) This radioactive material may be received, acquired, possessed and used only by physicians, veterinarians, clinical laboratories or hospitals and only for in vitro clinical or laboratory tests not involving internal or external administration of the material, or the radiation therefrom, to human beings or animals. Its receipt, acquisition, possession, use and transfer are subject to the regulations and a general license of the United States Nuclear Regulatory Commission or of a state with

which the commission has entered into an agreement for the exercise of regulatory authority.

Name of manufacturer

(ii) This radioactive material may be received, acquired, possessed and used only by physicians, veterinarians, clinical laboratories or hospitals and only for *in vitro* clinical or laboratory tests not involving internal or external administration of the material, or the radiation therefrom, to human beings or animals. Its receipt, acquisition, possession, use and transfer are subject to the regulations and a general license of a licensing state.

Name of manufacturer

- (e) The label affixed to the unit, or the leaflet or brochure which accompanies the package, contains adequate information as to the precautions to be observed in handling and storing such radioactive material. In the case of the Mock Iodine–125 reference or calibration source, the information accompanying the source must also contain directions to the licensee regarding the waste disposal requirements set out in WAC 402–24–130 of these regulations.
- (8) Licensing the manufacture and distribution of ice detection devices. An application for a specific license to manufacture and distribute ice detection devices to persons generally licensed under WAC 402-21-050(9) will be approved subject to the following conditions:
- (a) The applicant satisfies the general requirements of WAC 402-22-040; and
- (b) The criteria of Sections 32.61, 32.62, 32.103 of 10 CFR Part 32 are met.
- (9) Manufacture and distribution of radiopharmaceuticals containing radioactive material for medical use under group licenses. An application for a specific license to manufacture and distribute radiopharmaceuticals containing radioactive material for use by persons licensed pursuant to WAC 402–22–070(3) for the uses listed in Group I, Group IV, or Group V of WAC 402–22–200, Schedule A, will be approved if:
- (a) The applicant satisfies the general requirements specified in WAC 402-22-040 of this part;
 - (b) The applicant submits evidence that:
- (i) The radiopharmaceutical containing radioactive material will be manufactured, labeled and packaged in accordance with the Federal Food, Drug and Cosmetic Act or the Public Health Service Act, such as a new drug application (NDA) approved by the United States Food and Drug Administration (FDA), a biologic product license issued by FDA or a "notice of claimed investigational exemption for a new drug" (IND) that has been accepted by the FDA; or
- (ii) The manufacture, compounding and distribution of the radiopharmaceutical containing radioactive material is not subject to the Federal Food, Drug and Cosmetic Act and the Public Health Service Act;
- (c) The applicant submits information on the radionuclide, chemical and physical form, packaging including maximum activity per package, and shielding

provided by the packaging of the radioactive material which is appropriate for safe handling and storage of radiopharmaceuticals by group licensees; and

- (d) The label affixed to each package of the radiopharmaceutical contains information on the radionuclide, quantity and date of assay, and the label affixed to each package, or the leaflet or brochure which accompanies each package, contains a statement that the radiopharmaceutical is licensed by the department for distribution to persons licensed pursuant to WAC 402-22-070(3) and 402-22-200 Schedule A, Group I, Group II, Group IV, and Group V, as appropriate, or under equivalent regulations of the United States Nuclear Regulatory Commission, an agreement state or a licensing state. The labels, leaflets or brochures required by subsection (9) of this section are in addition to the labeling required by the Food and Drug Administration (FDA) and they may be separate from or, with the approval of FDA, may be combined with the labeling required by FDA.
- (10) Manufacture and distribution of generators or reagent kits for preparation of radiopharmaceuticals containing radioactive material. An application for a specific license to manufacture and distribute generators or reagent kits containing radioactive material for preparation of radiopharmaceuticals by persons licensed pursuant to WAC 402-22-070(3) for the uses listed in Group III of WAC 402-22-200, Schedule A will be approved if:
- (a) The applicant satisfies the general requirements specified in WAC 402-22-040;
 - (b) The applicant submits evidence that:
- (i) The generator or reagent kit is to be manufactured, labeled and packaged in accordance with the Federal Food, Drug and Cosmetic Act or the Public Health Service Act, such as a new drug application (NDA) approved by the Food and Drug Administration (FDA), a biologic product license issued by FDA, or a "Notice of claimed investigational exemption for a new drug" (IND) that has been accepted by the FDA; or
- (ii) The manufacture and distribution of the generator or reagent kit are not subject to the Federal Food, Drug and Cosmetic Act and the Public Health Service Act;
- (c) The applicant submits information on the radionuclide, chemical and physical form, packaging including maximum activity per package, and shielding provided by the packaging of the radioactive material contained in the generator or reagent kit;
- (d) The label affixed to the generator or reagent kit contains information on the radionuclide, quantity, and date of assay; and
- (e) The label affixed to the generator or reagent kit, or the leaflet or brochure which accompanies the generator or reagent kit; contains:
- (i) Adequate information, from a radiation safety standpoint, on the procedures to be followed and the equipment and shielding to be used in eluting the generator or processing radioactive material with the reagent kit; and
- (ii) A statement that this generator or reagent kit (as appropriate) is approved for use by persons licensed by

the department pursuant to WAC 402-22-070(3) and Group III of WAC 402-22-200, Schedule A, or under equivalent regulations of the United States Nuclear Regulatory Commission, an agreement state or a licensing state. The labels, leaflets or brochures required by subsection (10) of this section are in addition to the labeling required by FDA and they may be separate from or, with the approval of FDA, may be combined with the labeling required by FDA.

Note: Although the department does not regulate the manufacture and distribution of reagent kits that do not contain radioactive material, it does regulate the use of such reagent kits for the preparation of radiopharmaceuticals containing radioactive material as part of its licensing and regulation of the users of radioactive material. Any manufacturer of reagent kits that do not contain radioactive material who desires to have his reagent kits approved by the department for use by persons licensed pursuant to WAC 402-22-070(3) and Group III of WAC 402-22-200 Schedule A may submit the pertinent information specified in subsection (10) of this section.

- (11) Manufacture and distribution of sources or devices containing radioactive material for medical use. An application for a specific license to manufacture and distribute sources and devices containing radioactive material to persons licensed pursuant to WAC 402-22-070(3) for use as a calibration or reference source or for the uses listed in Group VI of WAC 402-22-200 Schedule A of this part will be approved if:
- (a) The applicant satisfies the general requirements in WAC 402-22-040 of this part;
- (b) The applicant submits sufficient information regarding each type of source or device pertinent to an evaluation of its radiation safety, including:
- (i) The radioactive material contained, its chemical and physical form and amount;
- (ii) Details of design and construction of the source or device;
- (iii) Procedures for, and results of, prototype tests to demonstrate that the source or device will maintain its integrity under stresses likely to be encountered in normal use and accidents;
- (iv) For devices containing radioactive material, the radiation profile of a prototype device;
- (v) Details of quality control procedures to assure that production sources and devices meet the standards of the design and prototype tests;
- (vi) Procedures and standards for calibrating sources and devices:
- (vii) Legend and methods for labeling sources and devices as to their radioactive content; and
- (viii) Instructions for handling and storing the source or device from the radiation safety standpoint, these instructions are to be included on a durable label attached to the source or device or attached to a permanent storage container for the source or device: *Provided*, That instructions which are too lengthy for such label may be summarized on the label and printed in detail on a brochure which is referenced on the label.
- (c) The label affixed to the source or device, or to the permanent storage container for the source or device, contains information on the radionuclide, quantity and date of assay, and a statement that the named source or

device is licensed by the department for distribution to persons licensed pursuant to WAC 402–22–070(3) and Group VI of WAC 402–22–200 Schedule A or under equivalent regulations of the United States Nuclear Regulatory Commission, an agreement state or a licensing state: *Provided*, That such labeling for sources which do not require long term storage (e.g., gold–198 seeds) may be on a leaflet or brochure which accompanies the source.

- (d) In the event the applicant desires that the source or device be required to be tested for leakage of radioactive material at intervals longer than six months, the applicant shall include in the application sufficient information to demonstrate that such longer interval is justified by performance characteristics of the source or device or similar sources or devices and by design features that have a significant bearing on the probability or consequences of leakage of radioactive material from the source.
- (e) In determining the acceptable interval for test of leakage of radioactive material, the department will consider information that includes, but is not limited to:
 - (i) Primary containment (source capsule);
 - (ii) Protection of primary containment;
 - (iii) Method of sealing containment;
 - (iv) Containment construction materials;
 - (v) Form of contained radioactive material;
- (vi) Maximum temperature withstood during prototype tests;
- (vii) Maximum pressure withstood during prototype tests:
- (viii) Maximum quantity of contained radioactive material;
- (ix) Radiotoxicity of contained radioactive material; and
- (x) Operating experience with identical sources or devices or similarly designed and constructed sources or devices.
- (12) Requirements for license to manufacture and distribute industrial products containing depleted uranium for mass-volume applications.
- (a) An application for a specific license to manufacture industrial products and devices containing depleted uranium for use pursuant to WAC 402-21-030(4) or equivalent regulations of the United States Nuclear Regulatory Commission or an agreement state will be approved if:
- (i) The applicant satisfies the general requirements specified in WAC 402-22-040;
- (ii) The applicant submits sufficient information relating to the design, manufacture, prototype testing, quality control procedures, labeling or marking, proposed uses and potential hazards of the industrial product or device to provide reasonable assurance that possession, use or transfer of the depleted uranium in the product or device is not likely to cause any individual to receive in any period of one calendar quarter a radiation dose in excess of ten percent of the limits specified in WAC 402-24-020(1); and

- (iii) The applicant submits sufficient information regarding the industrial product or device and the presence of depleted uranium for a mass-volume application in the product or device to provide reasonable assurance that unique benefits will accrue to the public because of the usefulness of the product or device.
- (b) In the case of an industrial product or device whose unique benefits are questionable, the department will approve an application for a specific license under subsection (12) of this section only if the product or device is found to combine a high degree of utility and low probability of uncontrolled disposal and dispersal of significant quantities of depleted uranium into the environment.
- (c) The department may deny any application for a specific license under subsection (12) of this section if the end use(s) of the industrial product or device cannot be reasonably foreseen.
- (d) Each person licensed pursuant to paragraph (12)(a) of this section shall:
- (i) Maintain the level of quality control required by the license in the manufacture of the industrial product or device, and in the installation of the depleted uranium into the product or device;
 - (ii) Label or mark each unit to:
- (A) Identify the manufacturer of the product or device and the number of the license under which the product or device was manufactured, the fact that the product or device contains depleted uranium, and the quantity of depleted uranium in each product or device; and
- (B) State that the receipt, possession, use and transfer of the product or device are subject to a general license or the equivalent and the regulations of the United States Nuclear Regulatory Commission or of an agreement state;
- (iii) Assure that the depleted uranium before being installed in each product or device has been impressed with the following legend clearly legible through any plating or other covering: "Depleted uranium";
- (iv) Furnish to each person to whom depleted uranium in a product or device is transferred for use pursuant to the general license contained in WAC 402-21-030(4) or its equivalent:
- (A) A copy of the general license contained in WAC 402-21-030(4) and a copy of department Form RHF-20; or
- (B) A copy of the general license contained in the United States Nuclear Regulatory Commission's or agreement state's regulation equivalent to WAC 402–21–030(4) and a copy of the United States Nuclear Regulatory Commission's or agreement state's certificate, or alternatively, furnish a copy of the general license contained in WAC 402–21–030(4) and a copy of department Form RHF– 20 with a note explaining that use of the product or device is regulated by the United States Nuclear Regulatory Commission or an agreement state under requirements substantially the same as those in WAC 402–21–030(4).
- (v) Report to the department all transfers of industrial products or devices to persons for use under the

general license in WAC 402–21–030(4). Such report shall identify each general licensee by name and address, an individual by name and/or position who may constitute a point of contact between the department and the general licensee, the type and model number of device transferred, and the quantity of depleted uranium contained in the product or device. The report shall be submitted within thirty days after the end of each calendar quarter in which such a product or device is transferred to the generally licensed person. If no transfers have been made to persons generally licensed under chapter 402–21 WAC during the reporting period, the report shall so indicate;

- (vi) Provide certain other reports as follows:
- (A) Report to the United States Nuclear Regulatory Commission all transfers of industrial products or devices to persons for use under the United States Nuclear Regulatory Commission general license in Section 40.25 of 10 CFR Part 40;
- (B) Report to the responsible department all transfers of devices manufactured and distributed pursuant to subsection (12) of this section for use under a general license in that state's regulations equivalent to WAC 402-21-030(4);
- (C) Such report shall identify each general licensee by name and address, an individual by name and/or position who may constitute a point of contact between the department and the general licensee, the type and model number of the device transferred, and the quantity of depleted uranium contained in the product or device. The report shall be submitted within thirty days after the end of each calendar quarter in which such product or device is transferred to the generally licensed person;
- (D) If no transfers have been made to United States Nuclear Regulatory Commission licensees during the reporting period, this information shall be reported to the United States Nuclear Regulatory Commission;
- (E) If no transfers have been made to general licensees within a particular agreement state during the reporting period, this information shall be reported to the responsible department; and
- (vii) Keep records showing the name, address and point of contact for each general licensee to whom the person transfers depleted uranium in industrial products or devices for use pursuant to the general license provided in WAC 402-21-030(4) or equivalent regulations of the United States Nuclear Regulatory Commission or of an agreement state. The records shall be maintained for a period of two years and shall show the date of each transfer, the quantity of depleted uranium in each product or device transferred, and compliance with the report requirements of this section.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-235-100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-22-110, filed 12/8/80. Statutory Authority: RCW 70.98.080. 79-12-073 (Order 1459), § 402-22-110, filed 11/30/79, effective 1/1/80. Formerly WAC 402-20-076.]

WAC 246-235-110 Special requirements for issuance of specific licenses for source material milling. In addition to the requirements set forth in WAC 402-22-

- 040, a specific license for source material milling will be issued if the applicant submits to the department a satisfactory application as described herein and meets the other conditions specified below:
- (1) An application for a license to receive title to, receive, possess, and use source material for milling or by-product material as defined in WAC 402-12-050(6) shall address the following:
 - (a) Description of the proposed project or action.
- (b) Area/site characteristics including geology, demography, topography, hydrology and meteorology.
- (c) Radiological and nonradiological impacts of the proposed project or action, including waterway and groundwater impacts.
 - (d) Environmental effects of accidents.
 - (e) Tailings disposal and decommissioning.
 - (f) Site and project alternatives.
- (g) Description of how the provisions of chapter 402-52 WAC shall be met.
- (2) Pursuant to WAC 402-22-040(6) the applicant shall not commence construction of the project until the department has weighed the environmental, economic, technical, and other benefits against the environmental costs and has concluded that the issuance of the license is appropriate.
- (3) Prior to issuance of a license, a public hearing shall be held. The scope shall extend to the question of license issuance and the adequacy of the reclamation, disposal, decommissioning, and decontamination plans.
- (4) At least one full year prior to any major site construction, a preoperational monitoring program shall be conducted to provide complete baseline data on a milling site and its environs. Throughout the construction and operating phases of the mill, an operational monitoring program shall be conducted to measure or evaluate compliance with applicable standards and regulations; to evaluate performance of control systems and procedures; to evaluate environmental impacts of operation; and to detect potential long—term effects.
- (5) Prior to issuance of the license, the mill operator shall establish financial surety arrangements consistent with the requirements of WAC 402-22-040(6).
- (6) The applicant shall provide procedures describing the means employed to meet the following requirements during the operational phase of any project.
- (a) Milling operations shall be conducted so that all effluent releases are reduced to as low as is reasonably achievable below the limits of chapter 402–24 WAC.
- (b) The mill operator shall conduct at least daily inspection of any tailings or waste retention systems. Records of such inspections shall be maintained for review by the department.
- (c) The mill operator shall immediately notify the department of the following:
- (i) Any failure in a tailings or waste retention system which results in a release of tailings or waste into unrestricted areas; and
- (ii) Any unusual conditions (conditions not contemplated in the design of the retention system) which if not corrected could lead to failure of the system and result in a release of tailings or waste into unrestricted areas.

(7) An application for a license to own, receive, possess and use byproduct material as defined in WAC 402–12–050 (6)(b) shall contain proposed specifications relating to the emissions control and disposition of the byproduct material to achieve the requirements and objectives set forth in the criteria listed in WAC 402–52–100.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-235-110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-22-150, filed 12/11/86. Statutory Authority: Chapter 70.121 RCW. 81-16-031 (Order 1683), § 402-22-150, filed 7/28/81.]

WAC 246-235-120 Schedule A groups of medical uses of radioactive material (ref. WAC 402-22-070(3) and 402-22-110(9)). (1) Group I. Use of prepared radiopharmaceuticals for certain diagnostic studies involving measurements of uptake, dilution and excretion. This group does not include imaging or localization studies.

- (a) Any radioactive material in a radiopharmaceutical and for a diagnostic use involving measurements of uptake, dilution or excretion for which a "Notice of claimed investigational exemption for a new drug" (IND) has been accepted by the Food and Drug Administration (FDA) or for which a "New drug application" (NDA) is in effect.
- (b) The provisions of (a) of this subsection notwithstanding, no radioactive material in gaseous form or for use as an aerosol is permitted by this subsection except as specifically authorized in a license.
- (2) Group II. Use of prepared radiopharmaceuticals for diagnostic imaging and localization studies.
- (a) Any radioactive material in a radiopharmaceutical and for a diagnostic use involving imaging or localizing for which a "Notice of claimed investigational exemption for a new drug" (IND) has been accepted by the Food and Drug Administration (FDA) or for which a "New drug application" (NDA) is in effect;
- (b) The provisions of (a) of this subsection notwithstanding, no radioactive material in gaseous form or for use as an aerosol is permitted by this subsection except as specifically authorized by a license or subsection (3)(b) of this section.
- (3) Group III. Use of generators and reagent kits for the preparation and use of radiopharmaceuticals containing radioactive material for diagnostic imaging and localization studies.
- (a) Any generator or reagent kit for preparation and diagnostic use of a radiopharmaceutical containing radioactive material for which generator or reagent kit a "Notice of claimed investigational exemption of a new drug" (IND) has been accepted by the Food and Drug Administration (FDA) or for which a "New drug application" (NDA) is in effect.
- (b) The provisions of (a) of this subsection notwith-standing, no generator or reagent kit is authorized for preparation of any gaseous form or aerosol of a radioactive material, except Technetium—99m as sodium pentetate as an aerosol for pulmonary function studies when used only with an approved and shielded delivery system, and disposed in accordance with applicable requirements, or as specifically authorized in a license.

- (4) Group IV. Use of prepared radiopharmaceuticals for certain therapeutic uses that do not normally require hospitalization for purposes of radiation safety.
- (a) Iodine-131 as iodide for treatment of hyperthyroidism and cardiac dysfunction;
- (b) Phosphorus-32 as soluble phosphate for treatment of polycythemia vera, leukemia and bone metastases;
- (c) Phosphorus-32 as colloidal chromic phosphate for intracavitary treatment of malignant effusions;
- (d) Any radioactive material in a radiopharmaceutical and for a therapeutic use not normally requiring hospitalization for purposes of radiation safety for which a "Notice of claimed investigational exemption for a new drug" (IND) has been accepted by the Food and Drug Administration (FDA) or for which a "New drug application" (NDA) is in effect.
- (5) Group V. Use of prepared radiopharmaceuticals for certain therapeutic uses that normally require hospitalization for purposes of radiation safety.
- (a) Gold-198 as colloid for intracavitary treatment of malignant effusions;
- (b) Iodine-131 as iodide for treatment of thyroid carcinoma;
- (c) Any radioactive material in a radiopharmaceutical and for a therapeutic use normally requiring hospitalization for radiation safety reasons for which a "Notice of claimed investigational exemption for a new drug" (IND) has been accepted by the Food and Drug Administration (FDA) or for which a "New drug application" (NDA) is in effect.
- (6) Group VI. Use of sources and devices containing radioactive material for certain medical uses.
- (a) Americium-241 as a sealed source in a device for bone mineral analysis;
- (b) Cesium-137 encased in needles and applicator cells for topical, interstitial, and intracavitary treatment of cancer;
- (c) Cobalt-60 encased in needles and applicator cells for topical, interstitial, and intracavitary treatment of cancer;
- (d) Gold-198 as seeds for interstitial treatment of cancer:
- (e) Iodine–125 as a sealed source in a device for bone mineral analysis;
- (f) Gadolinium-153 as a sealed source in a device for bone mineral analysis;
- (g) Iridium-192 as seeds encased in nylon ribbon for interstitial treatment of cancer;
- (h) Strontium-90 sealed in an applicator for treatment of superficial eye conditions; and
- (i) Iodine-125 as seeds for interstitial treatment of cancer.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \S 246–235–120, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), \S 402–22–200, filed 12/11/86. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), \S 402–22–200, filed 12/8/80. Statutory Authority: RCW 70.98.080. 79–12–073 (Order 1459), \S 402–22–200, filed 11/30/79, effective 1/1/80. Formerly WAC 402–20–260.]

WAC 246-235-130 Appendix-General laboratory rules for safe use of unsealed sources. (1) In addition to

the requirements set forth in WAC 402-22-040, a specific licensee who uses unsealed, unplated and/or liquid sources should the applicant possess adequate facilities including ventilation systems which are compatible with the proposed uses: and,

- (2) Possess, use, and store, radioactive materials in accordance with, but not limited to, the following:
- (a) Receive, handle, and store radioactive materials only at specifically designated locations within the applicant's facility. Vessels containing radioactive material must be labeled as required by chapter 402–24 WAC.
- (b) Wear disposable gloves at all times when handling dispersible radioactive material or potentially contaminated items.
- (c) Wear personnel monitoring devices (film badge and/or TLD), when required, at all times when working with, or in the vicinity of, radioactive materials. Extremity doses shall be considered in evaluating the need for separate extremity dosimeters. Calculations based on whole body badge results for photon emitters may be used in lieu of separate extremity dosimeters. Extremity dosimetry should be worn when working with millicurie or greater quantities of material (excluding low energy beta emitters and pure alpha emitters). Monitoring devices, when not in use, shall be stored only in a designated low—background area.
- (d) Use remote tools, lead shields, lead-glass shields, and/or plexiglass shields as appropriate.
- (e) Prohibit eating, chewing, drinking, smoking, and application of cosmetics in any area where radioactive material is used or stored.
- (f) Do not store food, drink or personal effects in any area, container, or refrigerator designated for radioactive materials use or storage.
- (g) Do not pipette radioactive materials or perform any similar operation by employing mouth suction.
- (h) Use disposable absorbent material with impervious backing to cover work surfaces where spillage is possible.
- (i) Properly dress and protect open wounds on exposed body surfaces before working with radioactive materials.
- (j) Wear laboratory coats when working with radioactive material. Potentially contaminated laboratory coats shall not be worn outside the immediate work area.
- (k) Nuclides in volatile form, or with a high potential for volatilization should be used only in areas with ventilation systems which conform to the requirements of WAC 402-24-030 and 402-24-050.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–235–130, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–22–240, filed 12/11/86; 83–19–050 (Order 2026), § 402–22–240, filed 9/16/83.]

WAC 246-235-140 Schedule B, limits for broad licenses. (See also WAC 402-22-090)

Radioactive Material	Col. I curies	Col. II curies
Antimony-122	1	0.01
Antimony-124	1	0.01
Antimony-125	1	0.01

Radioactive Material	Col. I curies	Col. II curies
Amania 72	10	0.1
Arsenic–73 Arsenic–74	10 1	0.1 0.01
Arsenic-76	1	0.01
Arsenic-77	10	0.1
Barium-131	10	0.1
Barium-140	1	0.01
Beryllium-7	10	0.1
Bismuth-210	0.1	0.001
Bromine-82	10	0.1
Cadmium-109	1	0.01
Cadmium-115m	1	0.01
Cadmium-115	10	0.1
Calcium-45	1	0.01
Calcium-47	10	0.1
Carbon-14	100	1.
Cerium-141	10 10	0.1
Cerium-143	0.1	0.1 0.001
Cerium–144 Cesium–131	100	1.
Cesium-134m	100	1.
Cesium-134m Cesium-134	0.1	0.001
Cesium-135	1	0.001
Cesium-136	10	0.1
Cesium-137	0.1	0.001
Chlorine-36	1	0.01
Chlorine-38-	100	1.
Chromium-51	100	1.
Cobalt-57	10	0.1
Cobalt-58m	100	1.
Cobalt-58	1	0.01
Cobalt-60	0.1	0.001
Copper-64	10	0.1
Dysprosium-165	100	1.
Dysprosium-166	10	0.1
Erbium-169	10	0.1
Erbium-171	10 10	0.1
Europium-152 (9.2h) Europium-152 (13 y)	0.1	0.1 0.001
Europium–152 (15 y) Europium–154	0.1	0.001
Europium–155	1	0.001
Fluorine–18	100	1.
Gadolinium-153	1	0.01
Gadolinium-159	10	0.1
Gallium-72	10	0.1
Germanium-71	100	1.
Gold-198	10	0.1
Gold-199	10	0.1
Hafnium-181	1	0.01
Holmium-166	10	0.1
Hydrogen-3	100	1.
Indium-113m	100	1.
Indium-114m	1	0.01
Indium-115m	100	1.
Indium-115 Iodine-125	1 0.1	0.01 0.001
Iodine–125	0.1	0.001
Iodine–129	0.1	0.001
Iodine-131	0.1	0.001
	···	0.001

Radioactive Material	Col. I curies	Col. II curies	Radioactive Material	Col. I curies	Col. II curies
Iodine-132	10	0.1	Samarium-153	10	0.1
Iodine-133	1	0.01	Scandium-46	1	0.01
Iodine-134	10	0.1	Scandium-47	10	0.1
Iodine-135	1	0.01	Scandium-48	: 1	0.01
Iridium-192	1	0.01	Selenium-75	1	0.01
Iridium–194	10	0.1	Silicon-31	10	0.1
Iron-55	10	0.1	Silver-105	1	0.01
Iron-59	1	0.01	Silver-110m	0.1	0.001
Krypton-85	100	1.	Silver-111	10	0.1
Krypton-87	10	0.1	Sodium-22	0.1	0.001
Lanthanum-140	1	0.01	Sodium-24	1 000	0.01
Lutetium-177	10	0.1 0.01	Strontium-85m	1,000	10. 0.01
Manganese-52	1	0.01	Strontium–85 Strontium–89	1 1	0.01
Manganese–54 Manganese–56	1 10	0.01	Strontium-90	0.01	0.0001
Mercury-197m	10	0.1	Strontium-91	10	0.0001
Mercury-197m	10	0.1	Strontium-92	10	0.1
Mercury-203	10	0.01	Sulphur-35	10	0.1
Molybdenum-99	10	0.1	Tantalum-182	1	0.01
Neodymium-147	10	0.1	Technetium-96	10	0.1
Neodymium-149	10	0.1	Technetium-97m	10	0.1
Nickel–59	10	0.1	Technetium-97	10	0.1
Nickel-63	1	0.01	Technetium-99m	100	1.
Nickel-65	10	0.1	Technetium-99	1	0.01
Niobium-93m	1	0.01	Tellurium-125m	1	0.01
Niobium-95	1	0.01	Tellurium-127m	1	0.01
Niobium-97	100	1.	Tellurium-127	10	0.1
Osmium-185	1	0.01	Tellurium-129m	1	0.01
Osmium-191m	100	1.	Tellurium-129	100	1.
Osmium-191	10	0.1	Tellurium-131m	10	0.1
Osmium–193	10	0.1	Tellurium-132	1	0.01
Palladium-103	10	0.1	Terbium-160	1	0.01
Palladium-109	10	0.1	Thallium-200	10	0.1
Phosphorus-32	1	0.01	Thallium-201	10 .	0.1
Platinum–191	10	0.1	Thallium-202	10	0.1
Platinum-193m	100	1.	Thallium-204	1	0.01
Platinum-193	10	0.1	Thulium-170	1	0.01
Platinum-197m	100 10	1. 0.1	Thulium-171 Tin-113	1 1	0.01 0.01
Platinum–197 Polonium–210	0.01	0.0001	Tin-115 Tin-125	1	0.01
Potassium-42	0.01	0.0001	Tungsten-181	1	0.01
Praseodymium-142	10	0.1	Tungsten-185	1	0.01
Praseodymium-143	10	0.1	Tungsten-187	10	0.1
Promethium-147	1	0.01	Vanadium-48	1	0.01
Promethium-149	10	0.1	Xenon-131m	1,000	10.
Radium-226	0.01	0.0001	Xenon-133	100	1.
Rhenium-186	10	0.1	Xenon-135	100	1.
Rhenium-188	10	0.1	Ytterbium-175	10	0.1
Rhodium-103m	1,000	10.	Yttrium–90	1	0.01
Rhodium-105	10	0.1	Yttrium-91	1	0.01
Rubidium-86	1	0.01	Yttrium-92	10	0.1
Rubidium-87	1	0.01	Yttrium-93	1	0.01
Ruthenium-97	100	1.	Zinc-65	1	0.01
Ruthenium-103	1	0.01	Zinc-69m	10	0.1
Ruthenium-105	10	0.1	Zinc-69	100	1.
Ruthenium-106	0.1	0.001	Zirconium-93	1	0.01
Samarium-151	1	0.01	Zirconium-95	1	0.01

[Title 246 WAC—p 166] (1990 Ed.)

Radioactive Material	Col. I curies	Col. II curies
Zirconium-97 Any radioactive material other than source material, special nu- clear material, or alpha emitting radioactive material not listed	1	0.01
above.	0.1	0.001

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–235–140, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 79–12–073 (Order 1459), § 402–22–250, filed 11/30/79, effective 1/1/80. Formerly WAC 402–20–270.]

Chapter 246–239 WAC RADIATION PROTECTION—NUCLEAR MEDICINE

WAC	
246-239-001	Purpose and scope.
246-239-010	Definitions.
246-239-020	Radiation safety committee.
246-239-030	Personnel monitoring.
246-239-040	Radiopharmaceuticals.
246-239-050	Radionuclide generators.
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246-239-070	Surveys.
246-239-080	Calibration and reference sources.
246-239-090	Instrumentation.
246-239-100	Radioactive gases.

WAC 246-239-001 Purpose and scope. The provisions of this chapter apply to all licensees utilizing radioactive materials in the practice of nuclear medicine and establish radiation safety requirements for those licensees. These provisions are in addition to, and not in substitution for, other applicable provisions of these regulations.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as \$246-239-001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83-19-050 (Order 2026), \$402-34-010, filed 9/16/83.]

- WAC 246-239-010 Definitions. (1) "Nuclear medicine" means the intentional internal or external administration of unsealed radioactive material to human beings.
- (2) "Nuclear medicine technologist" means any individual who performs nuclear medical procedures under the supervision of a physician licensed pursuant to chapter 402–22 WAC.
- (3) "Training" means instruction or experience acquired under the direct supervision of a physician, a certified/registered nuclear medicine technologist, and/or a qualified expert who has the necessary knowledge and training to advise personnel on radiation protection.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–239–010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–34–030, filed 9/16/83.]

WAC 246-239-020 Radiation safety committee. (1) Where required by license condition or pursuant to WAC 402-22-070(1), the radiation safety committee, shall meet at least once every six months. Where required by license condition, the committee shall meet at the frequency stated in the license or application. Such meetings shall be documented by written minutes and those minutes shall be maintained for inspection by the department for at least two years.

(2) Evaluation of the adequacy of the licensee's radiation safety program shall be conducted at least once each calendar year. Such evaluations may be performed by the radiation safety officer, a competent outside agent, or by qualified personnel at the licensee's own facility. These evaluations shall be documented, maintained for inspection by the department, and presented to the radiation safety committee for review and approval.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–239–020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–34–050, filed 9/16/83.]

WAC 246-239-030 Personnel monitoring. In addition to the requirements of WAC 402-24-070 and the conditions of the license, extremity monitoring (such as TLD ring badges) shall be provided and used on a monthly exchange basis for those personnel who elute Tc 99^m/Mo 99 generators.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–239–030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–34–090, filed 9/16/83.]

- WAC 246-239-040 Radiopharmaceuticals. (1) Radioactive material to be administered to humans shall be the subject of an FDA-approved "new drug application" (NDA) or an FDA-accepted "notice of claimed investigational exemption for a new drug" (IND), unless otherwise stated in the license.
- (2) Any licensee using radioactive material for clinical procedures other than those specified in the product labeling (package insert) shall comply with the product labeling regarding:
 - (a) Chemical and physical form;
 - (b) Route of administration; and
 - (c) Dosage range.
- (3) No licensee shall receive, possess, or use radioactive material as a radiopharmaceutical except when it has been:
- (a) Manufactured in the form to be administered to the patient, and labeled, packaged, and distributed, in accordance with a specific license; or
- (b) Prepared from reagent kits and/or radionuclide generators approved in accordance with WAC 402-22-070 (3)(b) and 402-22-110(10).
 - (4) The provisions of this part notwithstanding:
- (a) No radioactive material in gaseous form or for use as an aerosol is permitted except Technetium-99m pentetate used as an aerosol for lung function studies, or as specifically authorized by license condition. Radioactive aerosols must be administered with a closed,

shielded system that either is vented to the outside atmosphere through an air exhaust or provides for collection and disposal of the aerosol; and

- (b) No generator or reagent kit is authorized for preparation of any gaseous form or aerosol of the radio-active material, except as specifically authorized by license condition.
- (5) Radioactive material to be administered to humans shall be assayed for activity to determine the dose within ten percent accuracy of the prescribed dose prior to being administered to patients.
- (a) In the absence of a certificate from a supplier which specifies the activity of each dose, the license shall establish written procedures for the personnel to perform assays to an accuracy of ten percent of the prescribed dose prior to being administered to patients.
- (b) The licensee shall maintain for inspection by the department, records of the results of each assay performed to determine the activity of each dose administered to a patient. Records shall be maintained for two years following performance of each assay.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–239–040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–34–100, filed 9/16/83.]

- WAC 246-239-050 Radionuclide generators. (1) Any licensee who uses generators and reagent kits shall elute the generator or process radioactive material with the reagent kit in accordance with instructions which are approved by the department, the United States Nuclear Regulatory Commission, an agreement state, or a licensing state, and are furnished by the manufacturer on the label attached to, or in the leaflet or brochure, which accompanies the generator or reagent kit.
- (2) Tc-99m separated from Molybdenum 99 either by elution of a Molybdenum 99/Tc-99m generator or by an extraction process shall be tested to detect, and quantify Molybdenum 99 activity prior to administration to patients. The licensee shall not administer to patients Tc-99m containing more than 1.0 uCi of Molybdenum 99 per mCi of Tc-99m or more than 5.0 uCi of Molybdenum 99 per dose of Tc-99m at time of the administration. The limits for Molybdenum 99 contamination represent maximum values and Molybdenum 99 contamination should be kept as low as reasonably achievable below these limits.
- (a) In the absence of a certificate from the supplier of Tc-99m which specifies the quantity of Molybdenum 99, the licensee shall establish written procedures for personnel performing tests to detect and quantify Molybdenum 99 contamination. These procedures shall include all necessary calculations and steps to be taken if activities of Molybdenum 99 in excess of the limits specified in this part are detected.
- (b) Personnel performing tests to detect and quantify Molybdenum 99 contamination shall be given specific training in performing these tests prior to conducting such tests.
- (c) The licensee shall maintain for inspection by the department, records of the results of each test performed

to detect and quantify Molybdenum 99 contamination and records of training given to personnel performing these tests. Records shall be maintained for two years following the performance of each test and the training of personnel.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–239–050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–34–120, filed 9/16/83.]

WAC 246-239-060 Laboratory safety. In addition to those requirements found in WAC 402-22-240, the licensee shall utilize syringe shields or other shielding devices for all manipulations. Syringe shields should be used for injections whenever practicable.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-239-060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-34-140, filed 12/11/86; 83-19-050 (Order 2026), § 402-34-140, filed 9/16/83.]

- WAC 246-239-070 Surveys. In addition to applicable requirements found elsewhere in these regulations, and the license, each licensee shall:
- (1) Monitor hands and clothing for contamination after each procedure, or before leaving the restricted area;
- (2) Survey the laboratory work area for contamination after each procedure, or at the end of the day using instrumentation capable of measuring nanocurie amounts of activity. Survey documentation should include an area diagram or a description of the area or article and the instrumentation used. Such documentation shall be maintained for inspection by the department for two years.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–239–070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–34–150, filed 9/16/83.]

- WAC 246-239-080 Calibration and reference sources. (1) Any licensee who owns, receives, acquires, possesses, uses, or transfers calibration reference sources pursuant to the general license authorized in WAC 402-21-050(7) shall:
- (a) Maintain a file or log identifying such sources, including isotope, amount, model and serial numbers, manufacturer, date of receipt, date of transfer, and to whom transferred (where applicable);
- (b) Possess at any one time, and at any one location of storage or use, no more than five uCi of Am-241 and five uCi of Pu and five uCi of Ra-226 in such sources;
- (c) Store such source(s), except when the source(s) is being used, in a closed container adequately designed and constructed to contain Americium-241, Plutonium, or Radium 226 which might otherwise escape during storage; and
- (d) Not use such source(s) for any purpose other than the calibration of radiation detectors or the standardization of other sources.
- (2) Any licensee who receives, possesses, or uses calibration and reference standards pursuant to the group licensing provisions of WAC 402-22-070 (3)(c):

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- (a) Shall conduct leak tests in accordance with WAC 402-22-070 (3)(d);
- (b) Shall follow the radiation safety and handling instructions approved by the department, the United States Nuclear Regulatory Commission, and agreement state or a licensing state and furnished by the manufacturer on the label attached to the source, or permanent container thereof, or in the leaflet or brochure that accompanies the source, and maintain such instruction in a legible and conveniently available form; and
- (c) Shall conduct a quarterly physical inventory to account for all sources received and possessed. Records of the inventory shall be maintained for inspection by the department, and shall include, but not be limited to, the quantities and kinds of radioactive material, location of sources, and the date of inventory.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-239-080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83-19-050 (Order 2026), § 402-34-170, filed 9/16/83.]

WAC 246-239-090 Instrumentation. (1) Instrumentation used to conduct surveys shall be appropriate for the nuclide(s) and radiation levels present.

- (2) Portable and stationary survey instruments shall be calibrated at least once each calendar year, and after any repair using either approved procedures or by a facility specifically licensed to perform calibrations. Records shall be maintained for inspection by the department.
- (3) An operational check utilizing an appropriate check source shall be conducted.
- (4) Imaging systems shall have a flood performed daily when the system is used. In addition, mobile nuclear medicine services employing imaging systems which are moved from one facility to another shall perform a flood prior to use at each location. Bar phantoms shall be performed weekly. Records of such quality assurance for imaging systems, shall be maintained for inspection by the departments.
- (5) Appropriate source(s) for calibration and reference of dose calibrators shall be used. Dose calibrators shall receive:
 - (a) Daily constancy checks;
 - (b) Quarterly linearity tests;
 - (c) Annual tests for accuracy; and
- (d) Geometry tests upon installation and following major repair.
- (6) Quality assurance procedures for dose calibrators found in WAC 402-34-190(5), excluding daily constancy checks shall be conducted by individuals qualified to perform these tests, and shall be documented for future inspection by the department.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–239–090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–34–190, filed 9/16/83.]

WAC 246-239-100 Radioactive gases. (1) Licensees utilizing radioactive gases, such as Xenon-133 or Krypton-81m, shall have and use by January 1, 1984 a ventilation system adequate for such use, including an

approved trap. Radioactive gas shall be disposed only as specifically authorized by the license.

(2) Licensees utilizing radioactive gases shall maintain emissions in accordance with limits specified in chapters 402–24 and 402–80 WAC. Verification shall be documented. Such verification may be made by calculation, air samples, or the use of constant monitoring instrumentation.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–239–100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–34–210, filed 12/11/86; 83–19–050 (Order 2026), § 402–34–210, filed 9/16/83.]

Chapter 246–240 WAC RADIATION PROTECTION—MEDICAL THERAPY

WAC

246-240-001 Scope.

246-240-020 Interstitial, intracavitary and superficial applications.

246-240-030 Teletherapy.

246-240-040 Special requirements for teletherapy licensees.

WAC 246-240-001 Scope. The provisions of this chapter apply to all licensees who use sealed sources in the healing arts and are in addition to, and not in substitution for, other applicable provisions of these regulations.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–240–001, filed 12/27/90, effective 1/31/91; Order 1084, § 402–32–010, filed 1/14/76; Order 1, § 402–32–010, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-240-020 Interstitial, intracavitary and superficial applications. (1) Accountability, storage, and handling.

- (a) Except as otherwise specifically authorized by the department, each licensee shall provide accountability of sealed sources and shall keep a record of the issue and return of all sealed sources to their place of storage.
- (b) Each licensee shall conduct a quarterly physical inventory to account for all sources and devices received and possessed. Records of the inventories shall be maintained for inspection by the department and shall include the quantities and kinds of radioactive material, location of sources and devices, and the date of the inventory.
- (c) Each licensee shall follow the radiation safety and handling instructions approved by the department, the United States Nuclear Regulatory Commission, an agreement state or a licensing state and furnished by the manufacturer on the label attached to the source, device or permanent container thereof, or in the leaflet or brochure which accompanies the source or device, and maintain such instruction in a legible and conveniently available form.
- (d) Each licensee shall assure that needles or standard medical applicator cells containing Radium-226, or Cobalt-60 as wire are not opened while in the licensee's possession unless specifically authorized by license condition.

- (2) Testing sealed sources for leakage and contamination.
- (a) All sealed sources containing more than 100 microcuries of radioactive material with a half-life greater than thirty days, except Iridium-192 seeds encased in nylon ribbon, shall be tested for contamination and/or leakage at intervals not to exceed six months or at such other intervals as are approved by the department, the United States Nuclear Regulatory Commission, an agreement state or a licensing state and described by the manufacturer on the label attached to the source, device, or permanent container thereof, or in the leaflet or brochure which accompanies the source or device. Each source or device shall be so tested prior to its first use unless the supplier furnishes a certificate that the source or device has been so tested within six months prior to the transfer.
- (b) Leak tests shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample or in the case of radium, the escape of radon at the rate of 0.001 microcurie per twenty—four hours. The test sample shall be taken from the source or from the surfaces of the device in which the source is permanently or semipermanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the department.
- (c) Any leak test conducted pursuant to (a) of this subsection which reveals the presence of 0.005 microcurie or more of removable contamination or in the case of radium, the escape of radon at the rate of 0.001 microcurie per twenty-four hours, shall be considered evidence that the sealed source is leaking. The licensee shall immediately withdraw the source from use and cause it to be decontaminated and repaired or to be disposed of in accordance with department regulations. A report shall be filed within five days of the test with the department, describing the equipment involved, the test results, and the corrective action taken.
 - (3) Radiation surveys.
- (a) The maximum radiation level at a distance of one meter from the patient in whom brachytherapy sources have been inserted shall be determined by measurement or calculation. This radiation level shall be entered on the patient's chart and other signs as required under subsection (4) of this section.
- (b) The radiation levels in the patient's room and the surrounding area shall be determined, recorded, and maintained for inspection by the department.
- (c) The licensee shall assure that patients treated with Cobalt-60, Cesium-137, Iridium-192, or Radium-226 or any other nonpermanent implants remain hospitalized until a source count and a radiation survey of the patient and the patient's room confirm that all implants have been removed and are accounted for.
 - (4) Signs and records.
- (a) In addition to the requirements of WAC 402-24-090, the bed, cubicle, or room of the hospital brachytherapy patient shall be marked with a sign indicating the presence of brachytherapy sources. This sign shall

- incorporate the radiation symbol and specify the radionuclide, the activity, date, and the individual(s) to contact for radiation safety instructions. The sign is not required provided the exception in WAC 402-24-095(2) is met.
- (b) The following information shall be included for the duration of the patient's treatment in the patient's official hospital medical record/chart:
- (i) The radionuclide administered, number of sources, activity in millicuries and time and date of administration;
- (ii) The exposure rate at one meter, the time the determination was made, and by whom;
 - (iii) The radiation symbol; and
- (iv) The precautionary instructions necessary to assure that the exposure of individuals does not exceed that permitted under WAC 402-24-020.
- (5) Information required by subsection (4)(b)(i) and (ii) of this section shall be retained for review by the department.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–240–020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–32–020, filed 12/11/86; 83–19–050 (Order 2026), § 402–32–020, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–32–020, filed 12/8/80; Order 1084, § 402–32–020, filed 1/14/76; Order 1, § 402–32–020, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-240-030 Teletherapy. (1) Equipment.

- (a) The housing shall be so constructed that, at one meter from the source, the maximum exposure rate does not exceed ten milliroentgens per hour when the beam control mechanism is in the "off" position. The average exposure rate measured at a representative number of points about the housing, each one meter from the source, shall not exceed two milliroentgens per hour.
- (b) For teletherapy equipment installed after the effective date of these regulations, the leakage radiation measured at one meter from the source when the beam control mechanism is in the "on" position shall not exceed 0.1 percent of the useful beam exposure rate.
- (c) Adjustable or removable beam-defining diaphragms shall allow transmission of not more than five percent of the useful beam exposure rate.
- (d) The beam control mechanism shall be of a positive design capable of acting in any orientation of the housing for which it is designed to be used. In addition to an automatic closing device, the mechanism shall be designed so that it can be manually returned to the "off" position with a minimum risk of exposure.
- (e) The closing device shall be so designed as to return automatically to the "off" position in the event of any breakdown or interruption of the activating force and shall stay in the "off" position until activated from the control panel.
 - (f) Beam control mechanisms.
- (i) When any door to the treatment room is opened, the beam control mechanism shall automatically and rapidly restore the unit to the "off" position and cause it to remain there until the unit is reactivated from the control panel.

- (ii) Beam control mechanisms shall be tested at intervals not to exceed three months for proper function. Records of these tests shall be maintained for inspection by the department.
- (g) There shall be at the housing and at the control panel a warning device that plainly indicates whether the beam is on or off.
- (h) The equipment shall be provided with a locking device to prevent unauthorized use.
- (i) The control panel shall be provided with a timer that automatically terminates the exposure after a preset time.
- (j). Provision shall be made to permit continuous observation of patients during irradiation.
- (k) The treatment room shall be equipped with a permanent radiation monitor which shall:
- (i) Continuously monitor the condition of the teletherapy beam;
- (ii) Provide a continuous visible signal to the teletherapy unit operator and any person entering the treatment room, of a unit malfunction;
- (iii) Each radiation monitor must be equipped with an emergency power supply separate from the power supply to the teletherapy unit. This emergency power supply may be a battery system;
- (iv) Each radiation monitor must be tested for proper operation each day before the teletherapy unit is used for treatment of patients; and
- (v) If a radiation monitor is inoperable for any reason, any person entering the teletherapy room shall use a properly operating portable survey instrument or audible alarm personal dosimeter to monitor for any malfunction of the source exposure mechanism that may have resulted in an exposed or partially exposed source. Survey instruments or dosimeters must be tested daily before use.
- (2) Operation. Except in the emergency condition when a source fails to retract, no individual shall be in the treatment room during irradiation unless that individual is the patient. Mechanical restraining or supporting devices shall be used for positioning the patient, if necessary.
- (3) Testing for leakage and contamination. Teletherapy sources shall be tested for leakage and contamination in accordance with the procedures described in WAC 402-32-020(2). Tests of leakage may be made by wiping accessible surfaces of the housing port or collimator while the source is in the "off" position and measuring these wipes for transferred contamination.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–240–030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–32–030, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–32–030, filed 12/8/80; Order 1084, § 402–32–030, filed 1/14/76; Order 1, § 402–32–030, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-240-040 Special requirements for teletherapy licensees. (1) Requirement to perform full calibration requirements of teletherapy units.

(a) Any licensee authorized under WAC 402-22-070 to use teletherapy units for treating humans shall cause

- full calibration measurements to be performed on each teletherapy unit:
- (i) Prior to the first use of the unit for treating humans:
- (A) Whenever spot—check measurements indicate that the output value differs by more than five percent from the value obtained at the last full calibration corrected mathematically for physical decay;
- (B) Following replacement of the radiation source or following reinstallation of the teletherapy unit in a new location;
- (C) Following any repair of the teletherapy unit that includes removal of the source or major repair of the components associated with the source exposure assembly; and
 - (D) At intervals not exceeding one year.
- (b) Full calibration measurements required by (a) of this subsection shall include determination of:
- (i) The exposure rate or dose rate to an accuracy within ± 3 percent for the range of field sizes and for the range of distances (or for the axis distance) used in radiation therapy;
- (ii) The congruence between the radiation field and the field indicated by the light beam localizing device;
- (iii) The uniformity of the radiation field and its dependence upon the orientation of the useful beam;
 - (iv) Timer accuracy; and
- (v) The accuracy of all distance measuring devices used for treating humans.
- (c) Full calibration measurements shall be made in accordance with the procedures recommended by the Scientific Committee on Radiation Dosimetry of the American Association of Physicists in Medicine (Physics in Medicine and Biology, Vol. 16, No. 3, 1971, pp. 379–386).
- (d) The exposure rate or dose rate values determined in (b)(i) of this subsection shall be corrected mathematically for physical decay for intervals not exceeding one month for units employing a Cobalt-60 source and six months for units employing a Cesium-137 source.
- (e) Full calibration measurements required by (a) of this subsection and physical decay corrections required by (d) of this subsection shall be performed by an expert qualified by training and experience in accordance with subsection (4) of this section.
- (2) Requirement to perform periodic spot-check measurements of teletherapy units.
- (a) Any licensee authorized under WAC 402-22-070(4) to use teletherapy units for treating humans shall cause spot-check measurements to be performed on each teletherapy unit at intervals not exceeding one month.
- (b) Spot-check measurements required by (a) of this subsection shall include determination of:
 - (i) Timer accuracy;
- (ii) The congruence between the radiation field and the field indicated by the light beam localizing device;
- (iii) The accuracy of all distance measuring devices used for treating humans;
- (iv) The exposure rate, dose rate, or a quantity related in a known manner to these rates for one typical set of operating conditions; and

- (v) The difference between the measurement made in (b) of this subsection and the anticipated output, expressed as a percentage of the anticipated output (i.e., the value obtained at last full calibration corrected mathematically for physical decay).
- (c) Spot-check measurements required by (a) of this subsection shall be performed in accordance with procedures established by an expert qualified by training and experience in accordance with subsection (4) of this section. (A qualified expert need not actually perform the spot-check measurements.) If a qualified expert does not perform the spot-check measurements, the results of the spot-check measurements shall be reviewed by a qualified expert within fifteen days.
- (3) Requirement to calibrate instruments used for full calibration and spot-check measurements.
- (a) Full calibration measurements required by subsection (1) of this section shall be performed using a dosimetry system that has been calibrated by the National Bureau of Standards or by a Regional Calibration Laboratory accredited by the American Association of Physicists in Medicine. The dosimetry system shall have been calibrated within the previous two years and after any servicing that may have affected system calibration.
- (b) Spot-check measurements required by subsection (2) of this section shall be performed using a dosimetry system that has been calibrated in accordance with (a) of this subsection. Alternatively, a dosimetry system used solely for spot-check measurements may be calibrated by direct intercomparison with a system that has been calibrated in accordance with (a) of this subsection. This alternative calibration method shall have been performed within the previous one year and after each servicing that may have affected system calibration. Dosimetry systems calibrated by this alternative method shall not be used for full calibration measurements. The use of thermoluminescent dosimeter does not satisfy the requirements of this section.
- (4) Qualified expert. The licensee shall determine if a person is an expert qualified by training and experience to calibrate a teletherapy unit and establish procedures for (and review the results of) spot—check measurements. The licensee shall determine that the qualified expert:
- (a) Is certified by the American Board of Radiology in Therapeutic Radiological Physics, Radiological Physics, Roentgen-Ray and Osmina-Ray Physics, or X-ray and Radium Physics; or
- (b) Has the following minimum training and experience:
- (i) A master's or doctor's degree in physics, biophysics, radiological physics or health physics;
- (ii) One year of full-time training in therapeutic radiological physics; and
- (iii) One year of full-time experience in a radiotherapy facility including personal calibration and spotcheck of at least one teletherapy unit.

Note: The requirements of subsection (4) of this section are in addition to those set forth in WAC 402-12-050(41).

(5) Records.

- The licensee shall maintain, for inspection by the department, records of the measurements, tests, corrective actions, and instrument calibrations made under subsections (1) and (2) of this section and records of the licensee's evaluation of the qualified expert's training and experience made under subsection (4) of this section.
- (a) Records of (i) full calibration measurements and (ii) calibration of instruments used to make these measurements shall be preserved for five years after completion of the full calibration.
- (b) Records of (i) spot-check measurements and corrective actions and (ii) calibration of instruments used to make spot-check measurements shall be preserved for two years after completion of the spot-check measurements and corrective actions.
- (c) Records of the licensee's evaluation of the qualified expert's training and experience shall be preserved for five years after the qualified expert's last performance of a full calibration of the licensee's teletherapy
- (6) Inspection and servicing of the source exposure mechanism.
- (a) Each teletherapy machine shall be fully inspected and serviced during source replacement or at intervals not to exceed five years, whichever comes first, to assure proper function of the source exposure mechanism. This inspection and servicing must be performed by persons specifically authorized to do so by the department, the United States Nuclear Regulatory Commission, or an agreement state, and a complete written report of the inspection and servicing must be kept on file for review by the department.
- (b) The following shall be performed only by persons specifically authorized by the department, the United States Nuclear Regulatory Commission, or an agreement state to perform such services:
- (i) Installation, inspection, servicing, relocation, or removal of teletherapy units containing sources.
 - (ii) Source exchange.
- (iii) Any maintenance or repair operations on a teletherapy unit involving work on the source drawer, the shutter, or other mechanism that could expose the source, reduce the shielding around the source or compromise the safety of the unit and result in increased radiation levels.

¹Licensees that have their teletherapy units calibrated by persons who do not meet these criteria for minimum training and experience may require a license amendment excepting them from the requirements of subsection (4) of this section. The request should include the name of the proposed qualified expert, a description of his training and experience including information similar to that specified by subsection (4) of this section and a report of at least one calibration and spot—check program based on measurements personally made by the proposed expert within the last ten years and written endorsement of the technical qualifications of the proposed expert from personal knowledge by a physicist certified by the American Board of Radiology in one of the specialties listed therein.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–240–040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–32–100, filed 12/11/86; 83–19–050 (Order 2026), § 402–32–100, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–32–100, filed 12/8/80.]

Chapter 246-243 WAC

RADIATION PROTECTION--INDUSTRIAL RADIOGRAPHY

WAC

WAC	
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WAC 246-243-001 Purpose. The regulations in this chapter establish radiation safety requirements for persons utilizing sources of radiation for industrial radiography. The requirements of this part are in addition to and not in substitution for the other requirements of these regulations.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-243-001, filed 12/27/90, effective 1/31/91; Order 1084, § 402-36-010, filed 1/14/76; Order 1, § 402-36-010, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-243-010 Scope. The regulations in this chapter apply to all licensees or registrants who use sources of radiation for industrial radiography: *Provided*, *however*, That nothing in this part shall apply to the use of sources of radiation in the healing arts.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-243-010, filed 12/27/90, effective 1/31/91; Order 1084, § 402-36-020, filed 1/14/76; Order 1, § 402-36-020, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-243-020 Definitions. As used in this part:

(1) "Enclosed radiography" means industrial radiography employing radiation machines conducted in an enclosed cabinet or room and includes cabinet radiography and shielded room radiography.

- (a) "Cabinet radiography" means industrial radiography employing radiation machines conducted in an enclosure or cabinet so shielded that every location at the exterior meets the conditions specified in WAC 402–24–040 of these regulations.
- (i) "Cabinet x-ray system" means an x-ray system with the x-ray tube installed in an enclosure (hereinafter termed "cabinet") which, independently of existing architectural structure except the floor on which it may be placed, is intended to contain at least that portion of a material being irradiated, provide radiation attenuation, and exclude personnel from its interior during generation of x radiation. Included are all x-ray systems designed primarily for the inspection of carry-on baggage at airline, railroad, and bus terminals, and in similar facilities. An x-ray tube used within a shielded part of a building, or x-ray equipment which may temporarily or occasionally incorporate portable shielding is not considered a cabinet x-ray system.
- (b) "Shielded-room radiography" means industrial radiography conducted in a room so shielded that every location on the exterior meets the conditions specified in WAC 402-24-040 of these regulations.
- (2) "Industrial radiography" means the examination of the macroscopic structure of materials by nondestructive methods utilizing sources of radiation. Industrial radiography as used in this chapter does not include well logging operations.
- (3) "Permanent radiographic installation" means a shielded installation or structure designed or intended for radiography employing a radiographic exposure device and in which radiography is regularly performed, regardless of ownership.
- (4) "Personal supervision" means supervision by a radiographer such that the radiographer is physically present at the radiography site and in such proximity that communication can be maintained and immediate assistance given as required. When a radiographer's assistant is using or handling sources of radiation, the radiographer must maintain direct surveillance.
- (5) "Radiographer" means any individual who performs or who, in attendance at the site where sources of radiation are being used, personally supervises industrial radiographic operations and who is responsible to the licensee or registrant for assuring compliance with the requirements of these regulations and all license conditions.
- (6) "Radiographer's assistant" means any individual who, under the personal supervision of a radiographer, uses sources of radiation, related handling tools, or radiation survey instruments in industrial radiography.
- (7) "Radiographic exposure device" means any instrument containing a sealed source fastened or contained therein, in which the sealed source or shielding thereof may be moved, or otherwise changed, from a shielded to unshielded position for purposes of making a radiographic exposure.
- (8) "Shielded position" means the location within the radiographic exposure device or storage container which, by manufacturers design, is in one proper location for storage of the sealed source.

- (9) "Source changer" means a device designed and used for replacement of sealed sources in radiographic exposure devices, including those also used for transporting and storage of sealed sources.
- (10) "Storage container" means a device in which sealed sources are transported or stored.
- (11) Temporary job site refers to any location which is not specifically authorized and described in a license or registration.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–243–020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–36–025, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–36–025, filed 12/8/80; Order 1084, § 402–36–025, filed 1/14/76.]

WAC 246-243-030 Offshore operations. Offshore and/or underwater radiography shall be performed only by licensees whose license specifically authorizes such activity. Such operations fall under the jurisdiction of the United States Nuclear Regulatory Commission when conducted outside of the territorial waters of the state of Washington.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–243–030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–36–027, filed 9/16/83.]

- WAC 246-243-040 Equipment control. Limits on levels of radiation for radiographic exposure devices and storage containers:
- (1) Radiographic exposure devices measuring less than four inches from the sealed source storage position to any exterior surface of the device shall have no radiation level in excess of fifty milliroentgens per hour (50mR/hr) at six inches from any exterior surface of the device.
- (2) Radiographic exposure devices measuring a minimum of four inches from the sealed source storage position to any exterior surface of the device, and all storage containers for sealed sources or outer containers for radiographic exposure devices, shall have no radiation level in excess of two hundred milliroentgens per hour (200mR/hr) at any exterior surface, and ten milliroentgens per hour (10mR/hr) at one meter from any exterior surface.
- (3) The radiation levels specified are with the sealed source in the shielded (i.e., "off") position.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as $\$ 246–243–040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), $\$ 402–36–030, filed 12/8/80; Order 1084, $\$ 402–36–030, filed 1/14/76; Order 1, $\$ 402–36–030, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-243-050 Internal audit and training. (1) Each licensee shall conduct the internal audit required by WAC 402-22-070 (6)(c) at intervals not to exceed three months. The audit should be done by management or the radiation safety officer and shall cover a review or spot checks of the records required by WAC 402-12-080, 402-24-085, 402-24-125, 402-24-170, 402-36-060, 402-36-070, 402-36-080, 402-36-090, 402-36-

- 095, 402-36-100, 402-36-120, 402-36-150, 402-36-153, and 402-36-157, and conditions of the license.
- (2) Each radiographer performing radiography shall be audited at intervals not to exceed three months during the performance of radiography, to assure that the license provisions, regulations, and the licensees operating and emergency procedures are followed by radiographers and radiographer's assistants. This audit shall be performed by the radiation safety officer, management, or the most experienced radiographers available. Results of this audit shall be recorded.
- (3) Records of the internal audits required by subsections (1) and (2) of this section shall be maintained for two years.
- (4) Training required by WAC 402-22-070 (5)(a) shall be conducted in accordance with the conditions of the license and subject to the following criteria:
- (a) Initial training must be completed before a person can act as a radiographer or radiographer's assistant;
- (b) Periodic retraining must be conducted at least annually;
- (c) Records showing compliance with these training requirements must be maintained for at least one year following termination of employment.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–243–050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–36–035, filed 9/16/83.]

- WAC 246-243-060 Locking of radiographic exposure devices. (1) Each radiographic exposure device shall be provided with a lock or outerlocked container designed to prevent unauthorized or accidental production of radiation or removal or exposure of a sealed source and shall be locked when returned to the shielded position at all times. In addition, during radiographic operations the sealed source assembly shall be locked in the shielded position each time the source is returned to that position.
- (2) Each sealed source storage container and source changer shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. Storage containers and source changers shall be kept locked when containing sealed sources except when under the direct surveillance of a radiographer or a radiographer's assistant.
- (3) Radiographic exposure devices source changers, and storage containers, prior to being moved from one location to another and also prior to being secured at a given location, shall be locked and surveyed to assure that the sealed source is in the shielded position.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–243–060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–36–040, filed 12/8/80; Order 1084, § 402–36–040, filed 1/14/76; Order 1, § 402–36–040, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-243-070 Storage precautions. Locked radiographic exposure devices and storage containers shall be physically secured to prevent tampering or removal by unauthorized personnel.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–243–070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–36–050, filed 12/8/80; Order 1084, § 402–36–050, filed 1/14/76; Order 1, § 402–36–050, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-243-080 Radiation survey instruments. (1) The licensee or registrant shall maintain sufficient calibrated and operable radiation survey instruments to make physical radiation surveys as required by this part and chapter 402-24 WAC. Instrumentation required by this section shall have a range such that two milliroentgens per hour through one roentgen per hour can be measured.

- (2) Each radiation survey instrument shall be calibrated:
- (a) At energies appropriate for use and at intervals not to exceed three months and after each instrument servicing;
- (b) Such that accuracy within \pm 20 percent traceable to a national standard can be demonstrated; and
- (c) At two or more widely separated points, other than zero, on each scale.
- (3) Records shall be maintained of these calibrations for two years after the calibration date for inspection by the department.
- (4) The requirements of WAC 402-36-060 do not apply to registrants using only radiation machines in enclosed radiographic systems.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–243–080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–36–060, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–36–060, filed 12/8/80; Order 1084, § 402–36–060, filed 1/14/76; Order 1, § 402–36–060, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-243-090 Leak testing, repair, tagging, opening, modification, and replacement of sealed sources. (1) The replacement of any sealed source fastened to or contained in a radiographic exposure device and leak testing, repair, tagging, opening, or any other modification of any sealed source shall be performed only by persons specifically authorized to do so by the department, the United States Nuclear Regulatory Commission, or any agreement state.

- (2) Each sealed source shall be tested for leakage at intervals not to exceed six months. In the absence of a certificate from a transferor that a test has been made within the six-month period prior to the transfer, the sealed source shall not be put into use until tested and results obtained.
- (3) The leak test shall be capable of detecting the presence of 0.005 microcurie of removable contamination on the sealed source. An acceptable leak test for sealed sources in the possession of a radiography licensee would be to test at the nearest accessible point to the sealed source storage position, or other appropriate measuring point, by a procedure to be approved pursuant to WAC 402-22-070 (5)(e). Records of leak test results shall be kept in units of microcuries and maintained for inspection by the department for two years after the leak test is performed.

- (4) Any test conducted pursuant to subsections (2) and (3) of this section which reveals the presence of 0.005 microcurie or more of removable radioactive material shall be considered evidence that the sealed source is leaking. The licensee shall immediately withdraw the equipment involved from use and shall cause it to be decontaminated and repaired or to be disposed of, in accordance with regulations of the department. Within five days after obtaining results of the test, the licensee shall file a report with the department describing the involved equipment, the test results, and the corrective action taken.
- (5) A sealed source which is not fastened to or contained in a radiographic exposure device shall have permanently attached to it a durable tag at least one inch square bearing the prescribed radiation caution symbol in conventional colors magenta or purple on a yellow background, and at least the instructions: "Danger Radioactive material Do not handle Notify civil authorities if found."
- (6) Each radiographic exposure device shall have permanently and conspicuously attached to it a durable label at least two inches square bearing the prescribed radiation caution symbol in conventional colors (magenta or purple on a yellow background), and at a minimum the instructions, "Danger Radioactive material Do not handle Notify civil authorities if found."

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–243–090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–36–070, filed 12/11/86; 83–19–050 (Order 2026), § 402–36–070, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–36–070, filed 12/8/80; Order 1084, § 402–36–070, filed 1/14/76; Order 1, § 402–36–070, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-243-100 Quarterly inventory. Each licensee shall conduct a quarterly physical inventory to account for all sealed sources received or possessed. The records of the inventories shall be maintained for two years from the date of inventory for inspection by the department and shall include:

- (1) Exposure device or source changer make, model, and serial number:
 - (2) Sealed source serial number and manufacturer;
 - (3) Isotope and current activity;
 - (4) Location of device/changer;
 - (5) Date of inventory;
 - (6) Name of person who performed inventory.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–243–100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–36–080, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–36–080, filed 12/8/80; Order 1084, § 402–36–080, filed 1/14/76; Order 1, § 402–36–080, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-243-110 Utilization logs. (1) Each licensee and/or registrant shall maintain current logs, which shall be kept available for inspection by the department for two years from the date of the recorded event, at the address specified in the license showing for

each radiation exposure device the following information:

- (a) A description (or make and model number) of each radiation exposure device or storage container in which the sealed source is located:
- (b) The identity of the radiographer to whom assigned; and
 - (c) Locations where used and dates of use.
- (2) The requirements of subsection (1) shall not apply in industrial radiography utilizing radiation machines in enclosed interlocked cabinets or rooms which are not occupied during radiographic operations, which are equipped with interlocks such that the radiation machine will not operate unless all openings are securely closed and which is so shielded that every location on the exterior meets conditions for an unrestricted area, as specified in WAC 402-24-040.
- (3) A separately identified utilization log is not required if the equivalent information is available in records of the licensee or registrant and available at the address specified in the license.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-243-110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-36-090, filed 12/8/80; Order 1084, § 402-36-090, filed 1/14/76; Order 1, § 402-36-090, filed 1/8/69; Rules (part), filed 10/26/66.]

- WAC 246-243-120 Inspection and maintenance of radiographic exposure devices, control cables, storage containers and source changers. (1) The licensee shall conduct a program for inspection and maintenance of radiographic exposure devices, storage containers, control units (to include cables), and source changers at intervals, not to exceed three months or prior to first use thereafter to assure proper functioning of components important to safety. Records of these inspections and maintenance shall be kept for two years.
- (2) The licensee shall check for obvious defects in radiographic exposure devices, storage containers, control assemblies, and source changers prior to use each day the equipment is used.
- (3) The licensee's program shall include a thorough visual inspection for corrosion, and specific maintenance procedures that address corrosion removal and prevention.
- (4) If any inspection conducted pursuant to WAC 402-36-095(1) or (2) reveals damage to components critical to radiation safety, the device shall be removed from service until proper repairs have been made.
- (5) Any maintenance performed on radiographic exposure devices and accessories shall be in accordance with the manufacturer's specifications.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–243–120, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–36–095, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–36–095, filed 12/8/80; Order 1084, § 402–36–095, filed 1/14/76.]

WAC 246-243-130 Limitations—Personal radiation safety requirements for radiographers and radiographers' assistants. (1) No licensee or registrant shall permit any

- individual to act as a radiographer as defined in this chapter until such individual:
- (a) Has been instructed in the subjects outlined in WAC 402-36-160;
- (b) Has received copies of and instruction in the regulations contained in chapters 402–10, 402–12, 402–24, 402–36, and 402–48 WAC and the applicable sections of appropriate license(s), and the licensee's or registrant's operating and emergency procedures, and shall have demonstrated understanding thereof;
- (c) Has demonstrated competence to use the source of radiation, related handling tools, and radiation survey instruments which will be employed in the individual's assignment; and
- (d) Has demonstrated understanding of the instructions in this paragraph by successful completion of written test and a field examination on the subjects covered.
- (2) No licensee or registrant shall permit any individual to act as a radiographer's assistant as defined in this part until such individual:
- (a) Has received copies of and instruction in the licensee's or registrant's operating and emergency procedures;
- (b) Has demonstrated competence to use under the personal supervision of the radiographer the sources of radiation, related handling tools, and radiation survey instruments which will be employed in the individual's assignment;
- (c) Has demonstrated understanding of the instructions in this paragraph by successfully completing a written or oral test and a field examination on the subjects covered; and
- (d) Records of the above training including copies of written tests and dates of oral tests and field examinations shall be maintained for three years.
- (3) Each licensee or registrant shall maintain, for inspection by the department, records of training and testing which demonstrate that the requirements of WAC 402-36-100 (1) and (2) and 402-22-070 (5)(a) are met.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–243–130, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–36–100, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–36–100, filed 12/8/80; Order 1084, § 402–36–100, filed 1/14/76; Order 1, § 402–36–100, filed 1/8/69; Rules (part), filed 10/26/66.]

- WAC 246-243-140 Operating and emergency procedures. The licensee's or registrant's operating and emergency procedures shall include instructions in at least the following:
- (1) The handling and use of sources of radiation to be employed such that no individual is likely to be exposed to radiation doses in excess of the limits established in chapter 402–24 WAC Standards for protection against radiation;
- (2) Methods and occasions for conducting radiation surveys;
- (3) Methods for controlling access to radiographic areas;

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- (4) Methods and occasions for locking and securing sources of radiation;
- (5) Personnel monitoring and the use of personnel monitoring equipment including steps that must be taken immediately by radiography personnel in the event a pocket dosimeter is found to be off-scale;
- (6) Transportation to field locations, including packing of sources of radiation in the vehicles, posting of vehicles, and control of sources of radiation during transportation;
- (7) Minimizing exposure of individuals in the event of an accident;
- (8) The procedure for notifying proper personnel in the event of a theft, loss, overexposure or accident involving sources of radiation;
 - (9) Maintenance of records; and
- (10) The inspection and maintenance of radiographic exposure devices and storage containers.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \S 246–243–140, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), \S 402–36–110, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), \S 402–36–110, filed 12/8/80; Order 1084, \S 402–36–110, filed 1/14/76; Order 708, \S 402–36–110, filed 8/24/72; Order 1, \S 402–36–110, filed 7/2/71; Order 1, \S 402–36–110, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-243-150 Personnel monitoring control. (1) No licensee or registrant shall permit any individual to act as a radiographer or as a radiographer's assistant unless, at all times during radiographic operations, each such individual shall wear a film or TLD badge and a direct reading pocket dosimeter. Pocket dosimeters shall be capable of measuring doses from zero to at least 200 milliroentgens. A film or TLD badge shall be assigned to and worn by only one individual.

- (2) Pocket dosimeters shall be read and doses recorded daily. Pocket dosimeters shall be charged at the beginning of each working day. Pocket dosimeters shall be checked at periods not to exceed one year for correct response to radiation. Acceptable dosimeters shall read within plus or minus 30 percent of the true radiation exposure. A film or TLD badge shall be immediately processed if a pocket dosimeter is discharged beyond its range during normal use. The film or TLD badge reports received from the film or TLD badge processor and records of pocket dosimeter readings shall be maintained for inspection by the department until it authorizes their disposal.
- (3) The requirements for use of pocket dosimeter or pocket chamber shall not apply in industrial radiography utilizing radiation machines in enclosed interlocked cabinets or rooms which are not occupied during radiographic operations, which are equipped with interlocks such that the radiation machine will not operate unless all openings are securely closed and which are so shielded that every location on the exterior meets conditions for an unrestricted area, as specified in WAC 402–24–040.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-243-150, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83-19-050 (Order 2026), § 402-36-120, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81-01-011

(Order 1570), § 402–36–120, filed 12/8/80; Order 1084, § 402–36–120, filed 1/14/76; Order 1, § 402–36–120, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-243-160 Supervision of radiographers' assistants. Whenever a radiographer's assistant uses radiographic exposure devices, uses sealed sources or related source handling tools, or conducts radiation surveys required by WAC 402-36-150 (2), (3), or (4) to determine that the sealed source has returned to the shielded position after an exposure, he shall be under the personal supervision of a radiographer, as defined in WAC 402-36-025(4). Personal supervision shall include (1) the radiographer's personal presence at the site where the sealed sources are being used, (2) the ability of the radiographer to communicate and give immediate assistance if required, and (3) the radiographer's ability to observe the performance of his/her assistant during the operations referred to in this section.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–243–160, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–36–125, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–36–125, filed 12/8/80.]

WAC 246-243-170 Security—Precautionary procedures in radiographic operations. (1) During each radiographic operation, the radiographer or radiographer's assistant shall maintain a direct surveillance of the operation to protect against unauthorized entry into a high radiation area, as defined in chapter 402-12 WAC except:

- (a) Where the high radiation area is equipped with a control device or alarm system as described in WAC 402-24-090 (1)(e)(ii) or
- (b) Where the high radiation area is locked to protect against unauthorized or accidental entry.
- (2) When not in operation or when not under direct surveillance, portable radiation exposure devices and mobile or portable radiation machines shall be physically secured to prevent removal by unauthorized personnel.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–243–170, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–36–130, filed 12/8/80; Order 1084, § 402–36–130, filed 1/14/76; Order 1, § 402–36–130, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-243-180 Posting. Notwithstanding any provisions in paragraph WAC 402-24-095 areas in which radiography is being performed or in which a radiographic exposure device is being stored shall be conspicuously posted and access to the area shall be controlled as required by WAC 402-24-090.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–243–180, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–36–140, filed 12/8/80; Order 1084, § 402–36–140, filed 1/14/76; Order 1, § 402–36–140, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-243-190 Radiation surveys and survey records. (1) No radiographic operation shall be conducted unless calibrated and operable radiation survey instrumentation as described in WAC 402-36-060 is

available and used at each site where radiographic exposures are made.

- (2) A physical radiation survey shall be made after each radiographic exposure utilizing radiographic exposure devices or sealed sources of radioactive material to determine that the sealed source has been returned to its shielded position. The entire circumference of the radiographic exposure device shall be surveyed. If the radiographic exposure device has a source guide tube, the survey shall include the guide tube.
- (3) A physical radiation survey shall be made to determine that each sealed source is in its shielded condition prior to securing the radiographic exposure device or storage container as specified in WAC 402-36-040.
- (4) A physical radiation survey shall be made of the boundary of the restricted area during radiographic operations not employing shielded room radiography. The maximum survey reading at the boundary shall be recorded. The records shall indicate approximate distance from source to boundaries, whether or not the exposed source is collimated and any occupied areas with exposure levels greater than 2 mR in any hour during radiographic operations.
- (5) Records required by subsections (3) and (4) of this section shall include the model and serial number of the survey meter used and shall be maintained for inspection by the department for two years after completion of the survey. If the survey was used to determine an individual's exposure, however, the records of the survey shall be maintained until the department authorizes their disposition.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–243–190, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–36–150, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–36–150, filed 12/8/80; Order 1084, § 402–36–150, filed 1/14/76; Order 1, § 402–36–150, filed 1/8/69; Rules (part), filed 10/26/66.]

WAC 246-243-200 Records required at temporary job sites. Each licensee or registrant conducting industrial radiography at a temporary site shall have the following records available at that site for inspection by the department:

- (1) Appropriate license;
- (2) Operating and emergency procedures;
- (3) Applicable regulations;
- (4) Survey records required pursuant to WAC 402–36–150 for the period of operation at the site;
- (5) Daily pocket dosimeter records for the period of operation at the site;
- (6) The latest instrument calibration and leak test record for specific devices in use at the site.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-243-200, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-36-153, filed 12/8/80.]

WAC 246-243-210 Special requirements for enclosed radiography. (1) Systems for enclosed radiography designed to allow admittance of individuals during x-radiation generation shall:

- (a) Comply with all applicable requirements of chapter 402-36 WAC and WAC 402-24-040 of these regulations.
- (b) Be evaluated at intervals not to exceed one year to assure compliance with the applicable requirements as specified in WAC 402-36-155(1)(a). Records of these evaluations shall be maintained for inspection by the department for a period of two years after the evaluation.
- (c) Interlocks are required on all enclosed radiographic systems, such that the exposure will terminate if a door or port accessible to individuals is opened during the exposure, except for those systems employing conveyor belts or sample ports.
- (2) Cabinet x-ray systems designed to exclude individuals during x-radiation are exempt from the requirements of chapter 402-36 WAC except that:
- (a) Operating personnel must be provided with either a film badge or a thermoluminescent dosimeter and reports of the results must be maintained for inspection by the department.
- (b) No registrant shall permit any individual to operate a cabinet x-ray system until such individual has received a copy of and instruction in the operating procedures for the unit and has demonstrated competence in its use. Records which demonstrate compliance with this subparagraph shall be maintained for inspection by the department until disposition is authorized by the department.
- (c) Tests for proper operation of high radiation area control devices or alarm systems, where applicable, must be conducted at the beginning of each day of use and recorded.
- (d) The registrant shall perform an evaluation, at intervals not to exceed one year, to determine conformance with WAC 402-24-040 of these regulations.

Records of these evaluations shall be maintained for inspection by the department for a period of two years after the evaluation.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–243–210, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–36–155, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81–01–011 (Order 1570), § 402–36–155, filed 12/8/80; Order 1084, § 402–36–155, filed 1/14/76.]

- WAC 246-243-220 Special requirements for permanent radiographic installation. Permanent radiographic installations having high radiation area entrance controls of the types described in WAC 402-24-090 (1)(e)(ii) or where the high radiation area is locked to protect against unauthorized or accidental entry, shall also meet the following special requirements.
- (1) Each entrance that is used for personnel access to the high radiation area in a permanent radiographic installation to which this section applies shall have both visible and audible warning signals to warn of the presence of radiation. The visible signal shall be actuated by radiation whenever the source is exposed. The audible signal shall be actuated when an attempt is made to enter the installation while the source is exposed.
- (2) Both visible and audible alarm systems are required and shall be tested prior to the first use of a

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source in the installation and thereafter at intervals not to exceed three months. Records of the tests shall be kept for two years.

- (3) The department shall review and approve, in advance of construction, plans for permanent radiographic installations whose construction had not commenced by the effective date of these regulations. Construction of the permanent facility shall be in accordance with the plans approved by the department.
- (4) A physical radiation survey shall be conducted and results recorded following construction or major modification of the facility to be used in the installation. Radiography shall not be conducted if exposure levels in unrestricted areas are greater than 2 mR in any hour. Any increase in source strength will require resurvey of the installation prior to the conduct of industrial radiography.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-243-220, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83-19-050 (Order 2026), § 402-36-157, filed 9/16/83. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-36-157, filed 12/8/80.]

WAC 246-243-230 Appendix A--Minimum subjects to be covered in training radiographers. (1) Fundamentals of radiation safety

- (a) Characteristics of ionizing radiation
- (b) Units of radiation dose (mrem) and quantity of radioactivity (curie)
 - (c) Hazards of exposure to radiation
 - (i) Radiation protection standards
 - (ii) Biological effects of radiation dose
 - (d) Levels of radiation from sources of radiation
 - (e) Methods of controlling radiation dose
 - (i) Working time
 - (ii) Working distances
 - (iii) Shielding
 - (2) Radiation detection instrumentation to be used
 - (a) Use of radiation survey instruments
 - (i) Operation
 - (ii) Calibration
 - (iii) Limitations
 - (b) Survey techniques
 - (c) Use of personnel monitoring equipment
 - (i) Film badges
 - (ii) Pocket dosimeters
 - (iii) Thermoluminescent dosimeters
 - (3) Radiographic equipment to be used
 - (a) Remote handling equipment
 - (b) Radiographic exposure devices and sealed sources
 - (c) Storage containers
 - (d) Operation and control of x-ray equipment
- (4) The requirements of pertinent federal and state regulations
- (5) The licensee's or registrant's written operating and emergency procedures
 - (6) Case histories of radiography accidents.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-243-230, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. 81-01-011 (Order 1570), § 402-36-160, filed 12/8/80; Order 1084, § 402-36-160, filed 1/14/76; Order 1, § 402-36-160, filed 1/8/69; Rules (part), filed 10/26/66.]

- WAC 246-243-240 Appendix B-General guidelines for inspection of radiography equipment. (1) Panoramic devices (devices in which the source is physically removed from shielded container during exposure) should be inspected for:
 - (a) Radiographic exposure unit;
- (i) Abnormal surface radiation levels anywhere on camera;
 - (ii) Condition of safety plugs;
 - (iii) Proper operation of locking mechanism;
 - (iv) Condition of pigtail connector;
 - (v) Alignment of "S" tube with exit port;
 - (vi) Condition of carrying device (straps, handle, etc.);
 - (vii) Proper labeling;
 - (b) Source tube;
 - (i) Rust, dirt, or sludge buildup inside the source tube;
 - (ii) Condition of source tube connector;
 - (iii) Condition of source stop;
- (iv) Kinks or damage that could prevent proper operation;
 - (c) Control cables and drive mechanism;
- (i) Proper drive mechanism for this camera, if appropriate;
 - (ii) Changes in general operating characteristics;
 - (iii) Condition of connector on drive cable;
 - (iv) Drive cable flexibility, wear, and rust;
- (v) Excessive wear or damage to crank assembly parts;
- (vi) Damage to drive cable conduit that could prevent the cable from moving freely;
- (vii) Connection of the control cable connector with the pigtail connector for proper mating;
- (viii) Proper operation of source position indicator, if applicable.
 - (2) Directional beam devices should be inspected for:
 - (a) Abnormal surface radiation;
- (b) Changes in the general operating characteristics of the unit;
 - (c) Proper operation of shutter mechanism;
 - (d) Chafing or binding of shutter mechanism;
- (e) Damage to the device which might impair its operation;
 - (f) Proper operation of locking mechanism;
- (g) Proper drive mechanism with this camera, if appropriate;
 - (h) Condition of carrying device (strap, handle, etc.);
 - (i) Proper labeling.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–243–240, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 83–19–050 (Order 2026), § 402–36–165, filed 9/16/83.]

Chapter 246-244 WAC

RADIATION PROTECTION—WIRELINE SERVICES

WAC 246-244-001

Purpose.

246-244-010 Scope.

246–244–010 Scope. 246–244–020 Definitions.

246-244-030 Prohibitions.

246-244-040 Limits on levels of radiation.

246-244-050 Storage precautions.

246-244-060	Transport precautions.
246-244-070	Radiation survey instruments.
246-244-080	Leak testing of sealed sources.
246-244-090	Inventories.
246-244-100	Utilization logs/records.
246-244-110	Design, performance, and certification criteria for sealed sources used in downhole operations.
246-244-120	Labeling.
246-244-130	Inspection and maintenance.
246-244-140	Training requirements.
246-244-150	Operating and emergency procedures.
246-244-160	Personnel monitoring.
246-244-170	Radioactive contamination control.
246-244-180	Security.
246-244-190	Handling tools.
246-244-200	Subsurface tracer studies.
246-244-210	Radiation surveys.
246-244-220	Documents and records required at field stations.
246–244–230	Documents and records required at temporary job sites.
246-244-240	Notification of incidents, abandonment, and lost sources.

WAC 246-244-001 Purpose. This chapter establishes radiation safety requirements for persons using sources of radiation for wireline service operations including mineral logging, radioactive markers, and/or subsurface tracers studies. The requirements of this chapter are in addition to, and not in substitution for, requirements of chapters 402-10, 402-12, 402-19, 402-22, 402-24, and 402-48 WAC.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-244-001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-38-010, filed 12/11/86.]

WAC 246-244-010 Scope. The regulations in this chapter apply to all licensees who use sources of radiation for wireline service operations, including mineral logging, radioactive markers, uranium sinker bars, or subsurface tracer studies.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–244–010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–025, filed 12/11/86.]

WAC 246-244-020 Definitions. As used in this chapter, the following definitions apply:

- (1) "Casing" means a metal pipe or tube used as a lining for oil or gas wells to prevent collapse of the well-bore.
- (2) "Field station" means a facility where radioactive sources may be stored or used and from which equipment is dispatched to temporary job sites.
- (3) "Fresh water aquifer" means a geological formation that is capable of yielding a significant amount of fresh water to a well or spring.
- (4) "Injection tool" means a device used for controlled subsurface injection of radioactive tracer material.
- (5) "Irretrievable well-logging source" means any sealed source containing licensed material that is pulled off or not connected to the wireline that suspends the source in the well and for which all reasonable effort at recovery has been expended.

- (6) "Logging assistant" means an individual who assists the logging supervisor in performing the well-logging operations.
- (7) "Logging supervisor" means an individual who provides personal supervision of the use of licensed material at the temporary job site and who is responsible to the licensee for assuring compliance with requirements of the department's regulations and the conditions of the license
- (8) "Logging tool" means a device used subsurface to perform well-logging.
- (9) "Mineral logging" means any logging performed for the purpose of mineral (including water) exploration other than oil or gas.
- (10) "Personal supervision" means guidance and instruction by the supervisor who is physically present at the job site and watching the performance of the operation in such proximity that contact is maintained and immediate assistance given as required.
- (11) "Radioactive marker" means licensed material used for the purpose of depth determination or direction orientation. This term includes radioactive collar markers and radioactive iron nails.
- (12) "Sealed source" means any licensed material that is encased in a capsule designed to prevent leakage or escape of the radioactive material.
- (13) "Source holder" means the housing or assembly into which a radioactive source is placed for the purpose of facilitating the handling and use of such source in well-logging operations.
- (14) "Subsurface tracer study" means, for the purpose of this chapter, the release of unsealed licensed material or a substance labeled with licensed material in a single well or multiple wells for the purpose of tracing the movement or position of the material or substance in the well-bore or adjacent formation(s) (this term does not include the use of licensed material in field flooding studies).
- (15) "Surface casing" means a pipe or tube used as a lining in a well to isolate the fresh water zone from the well.
- (16) "Temporary job site" means any location to which radioactive materials have been dispatched or taken to perform wireline service operations or subsurface tracer studies.
- (17) "Uranium sinker bar" means a weight containing depleted uranium used for the purpose of providing additional force to pull a logging tool down toward the bottom of a well.
- (18) "Well-bore" means any drilled hole in which wireline service operations and/or subsurface tracer studies are performed.
- (19) "Well-logging" means the lowering and raising of measuring devices or tools which contain sources of radiation into well-bores or cavities (salt domes, etc.) for the purpose of obtaining information about the well and/or adjacent formations which may be used in oil, gas, mineral or geological explorations.
- (20) "Well-logging operation" means any activity involving licensed material performed in a well, including well-logging, mineral logging, subsurface tracer studies,

use of radioactive markers, radioactive iron nails, uranium sinker bars, and radioactive sands, and transportation or storage of same.

- (21) "Wireline" means a cable containing one or more electrical conductors which is used to lower and raise logging tools in the well-bore.
- (22) "Wireline service operation" means any evaluation or mechanical service which is performed in the well-bore using devices containing radioactive material on a wireline.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–244–020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–030, filed 12/11/86.]

WAC 246-244-030 Prohibitions. No licensee shall perform wireline service operations with a sealed source(s) or conduct subsurface tracer studies with sources of radiation unless, prior to commencement of the operation, the licensee has a written agreement with the well operator, well owner, drilling contractor, or land owner that:

- (1) In the event a sealed source is lodged downhole every reasonable effort at recovery will be made;
- (2) Potentially contaminated equipment or areas will not be released until an acceptable and documented survey is performed;
- (3) Specific types of recovery operations which could endanger the integrity of the sealed source encapsulation will not be permitted or conducted; and
- (4) In the event a decision is made to abandon the sealed source downhole, requirements of WAC 402-38-500 shall be met.

[Statutory Authority: RCW 43.70,040. 91–02–049 (Order 121), recodified as § 246–244–030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–040, filed 12/11/86.]

WAC 246-244-040 Limits on levels of radiation. Sources of radiation shall be used, stored, and transported in such a manner that the transportation requirements of WAC 402-19-500 and the dose limitation requirements of chapter 402-24 WAC are met.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-244-040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-38-060, filed 12/11/86.]

WAC 246-244-050 Storage precautions. (1) Each source of radiation, except accelerators, shall be provided with a storage and/or transport container. Such containers shall be utilized. The container shall be provided with a lock (or tamper seal, for calibration sources) to prevent unauthorized removal of, or exposure to, the source(s) of radiation. Such locks shall be used each time the source of radiation is placed in the storage/transport container.

(2) Sources of radiation shall be stored in a manner which will minimize danger from explosion and/or fire.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–244–050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–080, filed 12/11/86.]

- WAC 246-244-060 Transport precautions. (1) Transport containers shall be physically secured to the transporting vehicle to prevent accidental loss, tampering, or unauthorized removal.
- (2) Transport of radioactive material shall be in accordance with applicable provisions of the United States Department of Transportation, as required by WAC 402-19-500.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–244–060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–100, filed 12/11/86.]

WAC 246-244-070 Radiation survey instruments. (1) The licensee or registrant shall maintain and use sufficient calibrated and operable radiation survey instruments at each field station and temporary job site to

sufficient calibrated and operable radiation survey instruments at each field station and temporary job site to make physical radiation surveys as required. Instrumentation shall be capable of measuring 0.1 milliroentgen per hour through at least 100 milliroentgens per hour.

- (2) Each radiation survey instrument shall be calibrated:
- (a) At intervals not to exceed six months and after each instrument servicing;
- (b) At energies and radiation levels appropriate for use:
- (c) At two points located approximately one-third and two-thirds at full scale on each scale (for logarithmic scale, at midrange of each decade, and at two points of at least one decade); and
- (d) Such that accuracy within ± 20 percent of the true radiation levels can be demonstrated on each scale.
- (3) Each licensee shall have available additional calibrated and operable radiation detection instruments capable of detecting radiation and contamination levels that could be encountered during well-logging operations or during the event of an accident, e.g., an alpha meter in case of Am-241 source rupture, a contamination meter and probe, and a high level meter capable of detecting radiation levels up to at least one roentgen per hour. The licensee may own such instruments or may make prior arrangements to obtain them expeditiously from a second party as necessary.
- (4) Calibration records shall be maintained for a period of at least three years for inspection by the department.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–244–070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–120, filed 12/11/86.]

WAC 246-244-080 Leak testing of sealed sources. Each licensee utilizing sealed sources of radioactive material shall have the sources tested for leakage and/or contamination in accordance with WAC 402-24-060.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–244–080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–140, filed 12/11/86.]

- WAC 246-244-090 Inventories. (1) Each licensee shall conduct a physical inventory at intervals not to exceed three months to account for all sources of radiation received and possessed. Records of such inventories shall be maintained for at least two years from the date of the inventory for inspection by the department and shall include the quantities, kinds, and serial numbers of sources of radiation, the location where such sources of radiation are assigned and/or stored, the date of the inventory, and the name of the individual conducting the inventory.
- (2) Spotmarkers containing radioactive material shall be inventoried prior to arrival at a field site and prior to departure. Records of such inventories shall include the quantity and kinds of radioactive material, serial numbers where appropriate, the date and name of the person performing the inventory, and shall be maintained for inspection by the department.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-244-090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-38-160, filed 12/11/86.]

WAC 246-244-100 Utilization logs/records. Each licensee shall maintain current records, which shall be kept available for inspection by the department for two years from the date of recorded event, showing the following information for each source of radiation:

- (1) Make, model, and serial number of each source of radiation used;
- (2) The identity of the well-logging supervisor and logging assistants to whom assigned;
 - (3) The locations where used and dates of use; and
- (4) In the case of tracer materials and/or radioactive markers, the utilization records shall also indicate the radionuclide and quantity of activity used in a particular well.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–244–100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–180, filed 12/11/86.]

WAC 246-244-110 Design, performance, and certification criteria for sealed sources used in downhole operations. (1) Each sealed source, except those containing radioactive material in gaseous form, used in downhole operations shall be certified by the manufacturer, or other testing organization acceptable to the department, to meet the following minimum criteria:

- (a) Be of doubly encapsulated construction;
- (b) Contain radioactive material whose chemical and physical forms are as insoluble and nondispersible, respectively, as practical; and
- (c) Has been individually pressure tested to at least 24,656 pounds per square inch absolute (170 MN/m²) without leakage or failure.
- (2) Except those containing radioactive material in gaseous form, in the absence of a certificate from a transferor certifying that an individual sealed source meets the requirements of subsections (1) and (3) of this section, the sealed source shall not be put into use until such determinations and testings have been performed and acceptable documented results obtained.

- (3) Each sealed source, except those containing a radioactive material in gaseous form, used in downhole operations shall be certified by the manufacturer, or other testing organization acceptable to the department, to meet the sealed source performance requirements for oil well-logging as contained in the January 1986 or most current American National Standard N542, Sealed Radioactive Sources, Classification.
- (4) Certification documents shall be maintained for inspection by the department for a period of three years after source disposal. If a source is abandoned downhole, the certification documents shall be maintained until the department authorizes disposition.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–244–110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–200, filed 12/11/86.]

- WAC 246-244-120 Labeling. (1) Each source, source holder, and logging tool containing radioactive material shall bear a durable, legible, and clearly visible marking or label which has, at a minimum, the standard radiation caution symbol, with or without the conventional color requirement, and the following wording: "DANGER (Or CAUTION) RADIOACTIVE MATERIAL." This labeling shall be on the smallest component transported as a separate piece of equipment.
- (2) Each transport container shall have permanently attached to it a durable, legible, and clearly visible label which has, at a minimum, the standard radiation caution symbol and colors and the following wording: "DANGER (Or CAUTION) RADIOACTIVE MATERIAL, NOTIFY CIVIL AUTHORITIES IF FOUND."
- (3) The licensee may not use a uranium sinker bar in well-logging operations after December 31, 1987, unless it is clearly and legibly impressed with the words "CAUTION-RADIOACTIVE DEPLETED URANIUM" and "NOTIFY CIVIL AUTHORITIES IF FOUND."

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–244–120, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–220, filed 12/11/86.]

WAC 246-244-130 Inspection and maintenance. (1) Each licensee shall conduct a program of visual inspection and maintenance of source holders, logging tools, source handling tools, storage containers, transport containers, injection tools, and sinker bars to ensure that the required labeling is legible and that visual physical damage is absent. The licensee shall perform the visual inspection and maintenance at least every three months. Such inspection and maintenance shall follow the manufacturers recommendations for the equipment involved. Licensees shall maintain records of inspections and maintenance for three years for inspection by the department.

- (2) Each licensee shall maintain appropriate copies of manufacturer's operating and maintenance instructions at those locations where such inspection and maintenance is performed.
- (3) Each licensee shall inspect the source holders, logging tools, and source handling tools for obvious defects

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before the equipment is used each day to ensure that the equipment is in good working condition.

- (4) If any inspection conducted pursuant to this section reveals damage to the labeling or to components critical for radiation safety, the licensee shall remove the item from service until authorized repairs are made.
- (5) Removal of a sealed source from a source holder, and maintenance on sealed sources, holders, or pressure housings in which sealed sources are placed, or on other equipment containing a sealed source may not be performed unless a written instruction for the particular operation in question has been approved by the department as part of the license application.
- (6) If a sealed source is stuck in a source holder or logging tool, the licensee may not perform any operations such as drilling, cutting, or chiseling on the source holder or logging tool, unless it is specifically licensed by the department to perform this operation.
- (7) The repair, opening, or modification of any sealed source must be performed only by persons specifically licensed to do so by the department, the United States Nuclear Regulatory Commission, an agreement state, or a licensing state.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–244–130, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–240, filed 12/11/86.]

WAC 246-244-140 Training requirements. (1) The licensee may not permit an individual to act as a logging supervisor until that person:

- (a) Has completed at least forty hours of formal training in a course recognized by the department, the United States Nuclear Regulatory Commission, an agreement state, or a licensing state covering the subjects outlined in subsection (5) of this section;
 - (b) Has received copies of and instruction in:
- (i) Washington state regulations contained in this chapter and in the applicable chapters 402–10, 402–12, 402–24, and 402–48 WAC or their equivalent;
- (ii) The license under which the logging supervisor will perform well-logging operations; and
- (iii) The licensee's operating, recordkeeping, and emergency procedures.
- (c) Has completed three months of on-the-job training and demonstrated competence in the use of licensed materials, remote handling tools, and radiation survey instruments by a field evaluation; and
- (d) Has demonstrated understanding of the requirements in (a) and (b) of this subsection by successfully completing a closed book written test.
- (2) The licensee may not permit an individual to act as a logging assistant until that person:
- (a) Has received copies of and instruction in the licensee's operating and emergency procedures;
- (b) Has demonstrated understanding of the materials listed in subsection (1)(a) and (b) of this section by successfully completing a closed book written test; and
- (c) Has received instructions in the use, under the personal supervision of the logging supervisor, of tracer

material, sealed sources, remote handling tools, and radiation survey instruments, as appropriate.

- (3) Each licensee shall provide for documented refresher training of logging supervisors and logging assistants at intervals not to exceed twelve months.
- (4) Each licensee shall maintain a record of each logging supervisor's and logging assistant's training, including copies and dates of written tests for a minimum of three years following the termination of employment.
- (5) Each licensee shall include the following subjects in the formal training required by this chapter:
 - (a) Fundamentals of radiation safety:
 - (i) Characteristics of radiation;
- (ii) Units of radiation dose and quantity of radioactivity;
 - (iii) Hazards of exposure to radiation;
 - (iv) Levels of radiation from licensed material;
 - (v) Methods of controlling radiation dose:
 - (A) Working time;
 - (B) Working distances;
 - (C) Shielding;
- (D) Radiation safety practices, including prevention and contamination and methods of decontamination;
 - (b) Radiation detection instrumentation to be used:
 - (i) Use of radiation survey instruments:
 - (A) Operation;
 - (B) Calibration;
 - (C) Limitations;
 - (ii) Survey techniques;
 - (iii) Use of personnel monitoring equipment;
 - (c) Equipment to be used:
 - (i) Handling equipment and remote handling tools;
 - (ii) Licensed materials:
- (iii) Storage, control, and disposal of equipment and licensed material;
- (iv) Operation and control of equipment and licensed materials;
 - (v) Maintenance of equipment;
- (d) Requirements of pertinent state and federal regulations;
- (e) Case histories and potential consequences of accidents in well-logging operations.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–244–140, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–260, filed 12/11/86.]

WAC 246-244-150 Operating and emergency procedures. The licensee's operating and emergency procedures shall include instruction in at least the following:

- (1) Handling and use of sources of radiation to be employed such that no individual is likely to be exposed to radiation doses in excess of the standards established in chapter 402–24 WAC;
- (2) Methods and occasions for conducting radiation surveys;
- (3) Methods and occasions for locking and securing sources of radiation;
- (4) Personnel monitoring and the use and care of personnel monitoring equipment;

- (5) Transportation of sources of radiation to temporary job sites and field stations, including the marking, labeling, packaging, and placing of sources of radiation in vehicles, shipping papers, placarding of vehicles, and physical securing of sources of radiation to transport vehicles during transportation to prevent accidental loss, tampering, or unauthorized removal;
- (6) Minimizing personnel exposure, including that from inhalation and ingestion of licensed material, during well-logging operations and in the event of an accident:
- (7) Procedure for notifying proper personnel in the event of an accident;
 - (8) Maintenance of records;
- (9) Inspection and maintenance of source holders, logging tools, source handling tools, storage containers, transport containers, and injection tools;
- (10) Procedures to be followed in the event a sealed source is lodged downhole or ruptured;
- (11) Procedures to be used for picking up, receiving, and opening packages containing radioactive material;
- (12) The procedure and the use of tools for remote handling of sealed sources and radioactive tracer material, except low activity calibration sources;
- (13) The procedure to use for detecting contamination and for preventing the spread of contamination; and
- (14) The procedure to be used to decontaminate the environment, equipment, and/or personnel if any or all are contaminated.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–244–150, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–280, filed 12/11/86.]

- WAC 246-244-160 Personnel monitoring. (1) The licensee may not permit an individual to act as a logging supervisor or logging assistant unless that person wears, at all times during well-logging operations, either a film badge or thermoluminescent dosimeter (TLD). Each film badge or TLD must be assigned to and worn by only one individual. The film badge must be exchanged and analyzed at least monthly and TLD badges exchanged and analyzed at least every three months. The licensee shall have each badge or TLD processed in a timely fashion.
- (2) The licensee shall provide appropriate bioassay services to individuals using licensed materials for subsurface tracer studies.
- (3) The licensee shall keep reports received from the badge or TLD processor and from the bioassay service laboratory for inspection until the department authorizes disposition or terminates the license.
- (4) Personnel monitoring devices and equipment shall monitor for beta, gamma, and neutron radiation as appropriate.
- (5) Each licensee shall adhere to the requirements of the United States Nuclear Regulatory Commission Regulatory Guide 8.20 Applications of Bioassay for I-125 and I-131.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–244–160, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–300, filed 12/11/86.]

- WAC 246-244-170 Radioactive contamination control. (1) During efforts to recover a sealed source lodged in the well, the licensee shall continuously monitor, with an appropriate radiation detection instrument, the circulating fluids from the well to check for contamination resulting from damage to the sealed source.
- (2) If the licensee detects evidence that the sealed source has ruptured or licensed materials have caused contamination, it shall initiate required emergency procedures.
- (3) If contamination results from the use of licensed material in well-logging operations, the licensee shall decontaminate all work areas, equipment, and unrestricted areas to levels deemed appropriate by the department.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–244–170, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–320, filed 12/11/86.]

WAC 246-244-180 Security. During each logging or tracer application, the logging supervisor or other designated employee shall maintain direct surveillance of the operation to protect against unauthorized and/or unnecessary entry into the restricted area (as defined in WAC 402-12-050).

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–244–180, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–340, filed 12/11/86.]

WAC 246-244-190 Handling tools. The licensee shall provide and require the use of tools that will assure remote handling of sealed sources other than low activity calibration sources.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–244–190, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–360, filed 12/11/86.]

- WAC 246-244-200 Subsurface tracer studies. (1) Protective gloves and other appropriate protective clothing and equipment shall be used by all personnel handling radioactive tracer material. Adequate precautions shall be taken to avoid ingestion or inhalation of radioactive material, and to avoid contamination of field site stations and temporary job sites.
- (2) No licensee shall cause the injection or administration of radioactive material into fresh water aquifers without prior written authorization from the department and any other appropriate state agency.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as \$246-244-200, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), \$402-38-380, filed 12/11/86.]

WAC 246-244-210 Radiation surveys. (1) Radiation surveys shall be made and recorded for each area where radioactive materials are stored at intervals not to

exceed six months. In those cases where neutron sources are involved, calculations for dose rate may be substituted for direct measurement.

- (2) Radiation surveys shall be made and recorded for the radiation levels in occupied positions and on the exterior of each vehicle used to transport radioactive material. Such surveys shall include each and every source of radiation or combination of sources to be transported in the vehicle. In those cases where neutron sources are involved, calculations for dose rate may be substituted for direct measurement.
- (3) After removal of the sealed source from the logging tool and before departing the job site, the logging tool detector shall be energized and/or a survey meter used to assure that the logging tool and all related equipment are free of contamination.
- (4) Radiation surveys shall be made and recorded at the job site or well head for each tracer operation, except those using Hydrogen-3, Carbon-14, or Sulfur-35. Such surveys shall include measurements of radiation levels immediately before and after each operation.
- (5) If the licensee suspects that, as a result of operations involving a sealed source, the encapsulation of the sealed source could have been damaged by the operation, it shall conduct a radiation survey, including a contamination survey, during and after the operation.
- (6) The licensee shall make a radiation survey at the temporary job site for each subsurface tracer study. The survey must include measurement of radiation levels before and after the operation, and measurement of contamination levels after the subsurface tracer study.
- (7) Records of surveys required pursuant to this section shall include the dates, the identification of individuals making the survey, the identification of survey instruments used including make, model, serial number and calibration date, and an exact description of the location of the survey with diagram. Records of these surveys shall be maintained for inspection by the department for at least two years after completion of the survey.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-244-210, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-38-400, filed 12/11/86.]

WAC 246-244-220 Documents and records required at field stations. Each licensee shall maintain for inspection by the department the following documents and records for the specific devices and sources at the field station:

- (1) Appropriate license or equivalent documents;
- (2) Operating and emergency procedures;
- (3) Applicable regulations;
- (4) Records of the latest survey instrument calibrations required pursuant to WAC 402-38-120;
- (5) Records of the latest leak test results required pursuant to WAC 402-38-140;
- (6) Records of inventories required pursuant to WAC 402-38-160;
- (7) Utilization records required pursuant to WAC 402-38-180;

- (8) Records of inspection and maintenance required pursuant to WAC 402-38-240;
- (9) Survey records required pursuant to WAC 402-38-400; and
- (10) Training records required pursuant to WAC 402-38-260.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–244–220, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–420, filed 12/11/86.]

WAC 246-244-230 Documents and records required at temporary job sites. Each licensee conducting operations at a temporary job site shall have the following documents and records available at all times at that site for inspection by the department:

- (1) Current operating and emergency procedure(s);
- (2) Survey records required pursuant to WAC 402-38-400 for the period of operation at the site;
- (3) Actual current calibration certificates (or photocopies) for the radiation survey instruments used at the site;
- (4) When operating in the state of Washington under reciprocity, a copy of the appropriate license, and the Washington state rules and regulations for radiation protection;
- (5) Records of current leak tests for all sealed sources which require such tests at the job site;
 - (6) Use logs required pursuant to WAC 402-38-180;
- (7) Current United States Department of Transportation shipping papers and transport container certifications for the material transported; and
- (8) Records of spotmarker inventories made prior to arrival required pursuant to WAC 402-38-160.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-244-230, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-38-440, filed 12/11/86.]

WAC 246-244-240 Notification of incidents, abandonment, and lost sources. (1) Notification of incidents and sources lost in other than downhole logging operations shall be made in accordance with appropriate provisions of chapter 402-24 WAC.

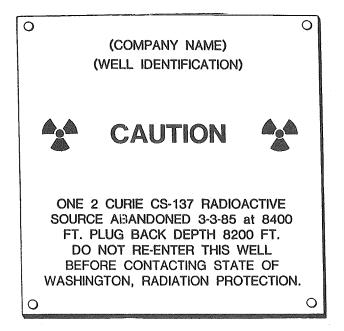
- (2) The licensee shall immediately notify the state of Washington office of radiation protection by telephone (206/753–3468) and subsequently within five days by confirmatory letter if:
- (a) Licensed material has been lost in or near a fresh water aquifer; or
- (b) A sealed source has been ruptured. This notice must designate the well or other location and describe the magnitude and extent of licensed materials, assess the consequences of the loss or rupture, and explain efforts planned or being taken to mitigate these consequences.
- (3) Whenever a sealed source or device containing radioactive material is lodged downhole, the licensee shall:
- (a) Monitor the surface for the presence of radioactive contamination with an appropriate radiation survey instrument (not the logging tool itself) during logging tool recovery operations; and

- (b) Notify the department immediately by telephone if radioactive contamination is detected at the surface or if the source appears to be damaged.
- (4) When it becomes apparent that efforts to recover the radioactive source will not be successful, the licensee shall:
- (a) Advise the well operator or owner, as appropriate, of the regulations of the state of Washington regarding abandonment, and an appropriate method of abandonment. The licensee shall ensure that such abandonment procedures are implemented within thirty days after the sealed source has been classified as irretrievable. Such abandonment procedures shall include:
- (i) Immobilization and sealing in place of the radioactive source with a cement plug;
- (ii) The setting of a whipstock or deflection device; and
- (iii) The mounting of a permanent identification plaque at the surface of the well, containing the appropriate information required by subsection (5) of this section;
- (b) Immediately notify the department by telephone (206/753-3468), giving the circumstances of the loss, and request and receive approval of the proposed abandonment procedures; and
- (c) File a written report with the department within thirty days of the abandonment, setting forth the following information:
- (i) Date and time of occurrence and a brief description of attempts to recover the source;
- (ii) A description of the radioactive source(s) involved, including radionuclide, quantity, make, model and serial number, and chemical and physical form;
 - (iii) Surface location and identification of well;
- (iv) Results of efforts to immobilize and seal the source in place;
 - (v) Depth of the radioactive source in meters or feet;
 - (vi) Depth to the top of cement plug in meters or feet;
 - (vii) Depth of the well in meters or feet; and
- (viii) Information contained on the permanent identification plaque.
- (5) Whenever a sealed source containing radioactive material is not recovered and is abandoned downhole, the licensee shall provide a permanent plaque at least eighteen centimeters square for posting the well or well bore (see Appendix A). This plaque shall:
- (a) Be constructed of long lasting material, such as stainless steel or monel; and
- (b) Contain the following information permanently and conspicuously engraved on its face:
 - (i) The word "CAUTION (or DANGER)";
- (ii) The radiation symbol(s) with or without the conventional color requirement;
 - (iii) The date of abandonment (month/day/year);
 - (iv) The name of the well operator or well owner;
- (v) The well name and well identification number(s) or other designation;
- (vi) The sealed source(s) by radionuclide and quantity of activity (if more than one source is involved, information for each source shall be included);

- (vii) The source depth and the depth to the top of the plug in meters or feet; and
- (viii) An appropriate warning, depending on the specific circumstances of each abandonment.¹
- (6) The department may, at its own discretion, impose such other requirements as it may deem necessary.
 - An example of a suggested plaque is shown in Appendix A of this section. Appropriate warnings may include:
 - (a) "Do not drill below plug back depth";
 - (b) "Do not enlarge casing"; and/or
- (c) "Do not reenter the hole before contacting the state of Washington radiation control section."

APPENDIX A

Example of Plaque for Identifying Wells Containing Sealed Sources Containing Radioactive Material Abandoned Downhole



The size of the plaque should be convenient for use on active or inactive wells, and shall be at least eighteen centimeters square. Letter size of the word "CAUTION" or "DANGER" shall be approximately twice the letter size of the rest of the information, e.g., one-half inch and one-fourth inch letter size, respectively.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–244–240, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–38–500, filed 12/11/86.]

Chapter 246–247 WAC RADIATION PROTECTION—AIR EMISSIONS

WAC
246-247-001 Purpose.
246-247-020 Applicability.
246-247-030 Exemptions.
246-247-040 Standards.
246-247-050 Registration.
246-247-060 Airborne emission permits.

246-247-070 New and modified sources. 246-247-080 Monitoring and reporting. 246-247-090 Special reports. 246-247-100 Regulatory actions.

WAC 246-247-001 Purpose. The purpose of this chapter is to establish procedures for the monitoring, control, and reporting of airborne radionuclide emissions from specific sources to assure compliance with applicable standards.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-247-001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-80-010, filed 12/11/86.]

WAC 246-247-010 Applicability. This chapter shall apply state-wide. These provisions apply to:

- (1) Facilities licensed by the department or by the United States Nuclear Regulatory Commission;
- (2) United States Department of Energy (DOE) facilities;
- (3) Non-DOE federal facilities that emit radionuclides to the air; and
- (4) Any other facilities having emissions of radionuclides to the air in amounts that can potentially cause a dose equivalent in excess of five mrem/year to the whole body or 15 mrem/year to the critical organ of any member of the public.
- (5) These provisions do not apply to facilities regulated under other state authorities, specifically:
 - (a) Uranium mill sites (chapter 402-52 WAC);
 - (b) Nuclear power reactors (chapter 463-54 WAC).

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-247-010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-80-020, filed 12/11/86.]

WAC 246-247-020 Exemptions. Types of facilities listed in Table I are exempt from this chapter because they either release no airborne radioactivity or because it has been determined that they would prima facie be in compliance with the standard.

TABLE I

- (1) Users of only sealed sources.
- (2) Low-energy accelerators (<200 MeV).
- (3) Reserved.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-247-020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-80-030, filed 12/11/86.]

WAC 246-247-030 Definitions. As used in this chapter, these terms have the definitions set forth below.

(1) "Best available radionuclide control technology (BARCT)" means technology which will result in a radionuclide emission limitation based on the maximum degree of reduction for radionuclides which would be emitted from any proposed stationary source or modification of a source which the permitting authority on a case—by—case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available

methods, systems, and techniques. In no event shall application of best available radionuclide technology result in emissions of radionuclides which would exceed the ambient annual standard limitation specified in this chapter.

- (2) "Critical organ" means the most exposed human organ or tissue exclusive of the integumentary system (skin) and the cornea.
- (3) "Department" means the department of social and health services.
- (4) "Dose equivalent" means the product of absorbed dose and appropriate factors to account for differences in biological effectiveness due to the quality of radiation and its distribution in the body. Units of dose equivalent are mrem.
- (5) "Emission source" means the point-of-release of airborne emissions of radioactive materials.
- (6) "Radionuclide" means any nuclide that emits radiation.
- (7) "Whole body" means all human organs or tissue exclusive of the integumentary system (skin) and the cornea.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–247–030, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.98 RCW. 88–17–060 (Order 2671), § 402–80–040, filed 8/17/88. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–80–040, filed 12/11/86.]

WAC 246-247-040 Standards. The ambient air quality standards and emission limits for radionuclides shall be those promulgated by the department of ecology in chapter 173-480 WAC. The WDOE ambient standard requires that emissions of radionuclides to the air shall not cause a dose equivalent of more than 25 mrem/year to the whole body or 75 mrem/year to a critical organ of any member of the public. Doses due to Radon-220, Radon-222, and their respective decay products are excluded from this chapter. These standards are consistent with Environmental Protection Agency Final Rules for National Emission Standards for Hazardous Air Pollutants (Standards for Radionuclides published in 40 CFR Part 61 on February 6, 1985).

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–247–040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–80–050, filed 12/11/86.]

WAC 246-247-050 Registration. (1) The owner or operator of each source of airborne radionuclide emissions within the following source categories (unless specifically exempted in WAC 402-80-030) shall register the source with the department:

- (a) NRC-licensed facilities;
- (b) United States Department of Energy Facilities;
- (c) Non-DOE federally owned or operated facilities;
- (d) Any other facility having emissions of radionuclides to air in amounts that cause a dose equivalent in excess of 5 mrem/year to the whole body or 15 mrem/year to the critical organ of any member of the public.
- (2) State licensees under the authority of other chapters of Title 402 WAC will be deemed registered.

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- (3) Registration shall be on forms to be supplied by the department. Upon a determination that registration of a particular source meets department of ecology and department of social and health services regulations, the department of social and health services will issue a permit authorizing the emission source with such conditions and limitations as it deems appropriate or necessary.
- (4) Fees for permit issuance and inspection services rendered by the department are covered in WAC 440–44–062. A report of closure shall be filed with the department whenever operations producing emissions are permanently ceased at any source within the above categories.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-247-050, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.98 RCW. 88-17-060 (Order 2671), § 402-80-060, filed 8/17/88. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-80-060, filed 12/11/86.]

WAC 246-247-060 Airborne emission permits. Each operator of radioactive airborne emission sources shall obtain a permit issued by the department to operate those sources. The department shall grant these permits only after receipt of the appropriate fees and registration materials and a full review of those materials by the department.

- (1) For emission sources at facilities licensed by the department, air emission permits shall be part of the source operator's radioactive materials license.
- (2) For emission sources at the United States Department of Energy (DOE) Hanford Site, the department shall issue one permit for each major production, processing, or research area, e.g., 200 East Area.
- (3) For emission sources at non-DOE federal facilities, the department shall issue one permit for each base or installation, e.g., Puget Sound Naval Shipyard.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–247–060, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.98 RCW. 88–17–060 (Order 2671), § 402–80–065, filed 8/17/88.]

WAC 246-247-070 New and modified sources. (1) Construction shall not commence, on any new source that is required to register per WAC 402-80-060, until a notice of construction has been approved per WAC 402-80-050.

- (2) The owner or operator of any source that is required to register per WAC 402-80-060 shall notify the department prior to replacement of radioactive emission control equipment or process equipment other than replacement for routine maintenance and repair. The department may determine that a notice of construction is required.
- (3) The construction, installation or establishment of a new source subject to this chapter shall utilize best available radionuclide control technology (BARCT).
- (4) Addition to, or enlargement, modification, replacement, alteration of any process or source, or replacement of radioactive emission control equipment which will significantly change potential radionuclide emissions or significantly change the dose equivalent to

any member of the public will require the proposed project to utilize BARCT for emission control.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–247–070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–80–070, filed 12/11/86.]

WAC 246-247-080 Monitoring and reporting. (1) The department may conduct an environmental surveillance program to assure that radiation exposures to the public from airborne radionuclide emission sources are in compliance with applicable standards.

- (2) As a part of the surveillance program, the department may require the operator of any facility under the jurisdiction of the department to conduct stack sampling, ambient air monitoring, or other testing as necessary and to report the results to the department. Such testing may include computer dose modeling and verification.
- (3) The use of continuous monitoring equipment by the facility operator is encouraged but may not be feasible for some radionuclides. If the department determines that continuous monitoring is not a feasible or reasonable requirement, alternative monitoring and reporting procedures will be established on an individual basis. These may take the form of stack tests conducted at a frequency sufficient to establish emission levels over time and to monitor deviations in these levels.
- (4) The facility operator or owner shall submit a semiannual inventory of emissions from the source upon a form, and according to instructions, issued by the department.
- (5) The semiannual inventory shall specify the quantities of each of the principal radionuclides released to unrestricted areas in airborne emissions during the previous six months. This data shall be reported in a manner that will permit the department to confirm the potential annual radiation doses to the public. Reports shall be due in writing by May 1 and November 1 of each year.
- (6) To determine compliance with applicable standards, radionuclide emissions shall be determined and dose equivalent to members of the public shall be calculated using EPA-approved sampling procedures, EPA codes AIRDOS-EPA and RADRISK, or other procedures, including those based on environmental measurements, that the department has determined to be suitable. In most cases, compliance will be determined by calculating the dose to members of the public at the point of maximum annual air concentration in an unrestricted area.
 - (7) The following is a list of approved procedures: (to be provided later)
- (8) In order to demonstrate compliance with this chapter, the department may require that a test be made of the emission source. The operator of the source may be required to provide a sampling platform and sampling ports for the department to perform an emission test. The department shall be allowed to obtain a sample from any emissions unit. The operator may observe the sampling and may obtain a sample at the same time.

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[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-247-080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-80-080, filed 12/11/86.]

WAC 246-247-090 Special reports. The facility operator shall advise the department immediately of any shutdown, abnormal operation, or other change in facility operation which could result in an airborne radionuclide emissions violation of applicable standards. If requested by the department, the owner/operator shall submit a written report including known causes, corrective actions taken, and any preventative measures to be taken to minimize or eliminate the chance of recurrence. (See WAC 402-24-190.)

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-247-090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-80-090, filed 12/11/86.]

WAC 246-247-100 Regulatory actions. The department may take any of the following regulatory actions to enforce this chapter.

- (1) Notice of violation. Whenever the department has reason to believe that any provision of this chapter has been violated, it may cause written notice to be served on the alleged violator or violators. The notice shall specify the provision of this chapter alleged to be violated and the facts alleged to constitute a violation thereof, and may include an order that necessary corrective action be taken within a reasonable time.
- (2) Compliance orders. The department may issue a compliance order in conjunction with a notice of violation. The order shall require the recipient of the notice of violation either to take necessary corrective action or to submit a plan for corrective action and a date when such action will be initiated.
- (3) Assurance of discontinuance. The department may accept an assurance of discontinuance of any act or practice deemed in violation of this chapter. Any such assurance shall specify a time limit during which discontinuance is to be accomplished. Failure to perform the terms of any such assurance shall constitute prima facie proof of a violation of this chapter which make the alleged act or practice unlawful for the purpose of securing an injunction or other relief from the superior court.
- (4) Violations. An injunction or other court order may be obtained prohibiting any violation of any provision of the act or any regulation or order issued thereunder. Any person who violates any provision of the act or any regulation or order issued thereunder may be guilty of a gross misdemeanor and upon conviction, may be punished by fine or imprisonment or both, as provided by law.
- (5) Impoundment. Sources of radiation shall be subject to impoundment pursuant to WAC 402-12-140.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-247-100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-80-100, filed 12/11/86.]

Chapter 246-249 WAC RADIOACTIVE WASTE--USE OF THE COMMERCIAL DISPOSAL SITE

246-249-001	Purpose and scope.
246-249-010	Definitions.
246-249-020	Site use permit.
246-249-030	Waste shipment certification.
246-249-040	Classification of radioactive waste for near-surface
	disposal.
246-249-050	Acceptable radioactive waste forms and packaging.
246-249-060	Labeling.
246-249-070	Variances.
246-249-080	Transfer for disposal and manifests.

WAC 246-249-001 Purpose and scope. This chapter provides rules governing generators and brokers of low-level radioactive waste seeking to dispose of such waste at any commercial disposal facility in the state of Washington. These rules are in addition to applicable requirements of the United States Nuclear Regulatory Commission (NRC), the United States Department of Transportation (DOT), and other requirements of Title 402 WAC, the requirements of the department of ecology, Title 173 WAC, and conditions of the license issued to the disposal site operator(s).

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-249-001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-62-010, filed 12/11/86.]

WAC 246-249-010 Definitions. As used in this chapter, the following definitions apply:

- (1) "Low-level radioactive waste" means radioactive waste not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or by-product material as defined in section 11e.(2) of the Atomic Energy Act.
- (2) "Broker" means a person who performs one or more of the following functions for a low-level radioactive waste generator:
- (a) Arranges for transportation of the low-level radioactive waste;
- (b) Collects and/or consolidates shipments of such low-level radioactive waste;
- (c) Processes such low-level radioactive waste in some manner; provided it shall not mean a carrier whose sole function is to transport such low-level radioactive waste.
- (3) "Shipper" or "consignor" means the last licensee to possess the low-level radioactive waste prior to transportation to the low-level radioactive waste disposal site, normally the generator when no broker is involved; otherwise, the broker.
- (4) "Generator" means the last person who puts radioactive material to practical use, and who then declares it to be no longer of use or value.
- (5) "Motor vehicle" means any vehicle, truck, tractor, semi-trailer, or trailer (or any permitted combination of these), driven by mechanical power and used upon the highways to carry property.
- (6) "Motor common carrier" means a person holding itself out to the general public to provide motor vehicle

transportation for compensation over regular or irregular routes, or both.

- (7) "Motor contract carrier" means a person other than a common carrier providing motor vehicle transportation of property for compensation under continuing agreements with one or more persons.
- (8) "Motor private carrier" means a person, other than a motor carrier, transporting property by motor vehicle when the person is the owner, lessee, or bailee of the property being transported; and the property is being transported for sale, lease, rent, or bailment, or to further a commercial enterprise.
- (9) "Motor carrier" means a motor common carrier and a motor contract carrier.
- (10) "Shipment" means the total low-level radioactive waste material transported in one motor vehicle.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–249–010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–62–020, filed 12/11/86.]

WAC 246-249-020 Site use permit. (1) Each generator and each broker of low-level radioactive waste shall possess a valid and unencumbered site use permit prior to the shipment of such waste to, or the disposal of such waste at any commercial disposal facility in the state of Washington and shall have complied with the permit requirements of the department of ecology.

- (2) Suspension or revocation of permit.
- (a) The failure of one or more packages in a shipment of waste to be in compliance with one or more of the requirements of the license issued to the commercial low–level radioactive waste disposal site operator, Title 402 WAC, the United States Nuclear Regulatory Commission, the United States Department of Transportation, or conditions of the disposal site operator's radioactive materials license may cause the suspension of the site use permit of the responsible generator and/or broker.
- (b) The site use permit of a generator and/or broker may be suspended or revoked if any other licensed commercial low-level radioactive waste disposal site in the United States has refused to accept waste from that generator or broker.
- (c) A suspended site use permit may be reinstated provided the generator and/or broker submits a quality assurance procedure designed to correct previous problems and to achieve compliance with all applicable requirements.
 - (3) Brokered shipments.
- (a) It is the broker's responsibility to assure that a generator of waste has a valid unencumbered site use permit prior to shipment of waste for disposal.
- (b) A broker, as consignor, assumes coresponsibility with a generator for all aspects of that generator's waste until it can be documented to the department's satisfaction that the broker's sphere of responsibility was limited.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-249-020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-62-030, filed 12/11/86.]

- WAC 246-249-030 Waste shipment certification. (1) A low-level radioactive waste shipment certification, Form RHF-31, must accompany each shipment of radioactive waste to a licensed low-level radioactive waste burial site. All three sections of the form must be completed. The certification shall be submitted at the disposal site to the department of social and health services or its designee, and must be judged to be properly executed prior to the acceptance of the waste by the site operator. If a broker is involved, the broker's and carrier's sections must bear original signatures. The generator's signature need not be an original signature. If a broker is acting as the processor and or packager of the waste, the broker may act as the agent of the generator and may sign the certification statement for the generator, provided the name and site use permit number of the original generator are identified. If no broker is involved, the generator shall so signify by entry in the broker's section of the form that no broker was involved, e.g., "no broker," and the generator and carrier's section must bear original signatures.
- (2) In the case of brokered shipments from more than a single generator, information on each generator's certification shall include data clearly identifying, without reference to other documentation, each package transferred from that generator to the broker. The data shall be compatible with package identifications on the shipment manifest (RSR) from the broker, and with identification markings on the packages.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-249-030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-62-040, filed 12/11/86.]

WAC 246-249-040 Classification of radioactive waste for near-surface disposal. (1) Considerations. Determination of the classification of waste involves two considerations. First, consideration must be given to the concentration of long-lived radionuclides (and their shorter-lived precursors) whose potential hazard will persist long after such precautions as institutional controls, improved waste form, and deeper disposal have ceased to be effective. These precautions delay the time when long-lived radionuclides could cause exposures. In addition, the magnitude of the potential dose is limited by the concentration and availability of the radionuclide at the time of exposure. Second, consideration must be given to the concentration of shorter-lived radionuclides for which requirements on institutional controls, waste form, and disposal methods are effective.

- (2) Classes of waste.
- (a) Class A waste is waste that is usually segregated from other waste classes at the disposal site. The physical form and characteristics of Class A waste must meet the minimum requirements set forth in WAC 402-62-060(1). If Class A waste also meets the stability requirements set forth in WAC 402-62-060(2), it is not necessary to segregate the waste for disposal.
- (b) Class B waste is waste that must meet more rigorous requirements on waste form to ensure stability after disposal. The physical form and characteristics of

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Class B waste must meet both the minimum and stability requirements set forth in WAC 402-62-060.

- (c) Class C waste is waste that not only must meet more rigorous requirements on waste form to ensure stability but also requires additional measures at the disposal facility to protect against inadvertent intrusion. The physical form and characteristics of Class C waste must meet both the minimum and stability requirements set forth in WAC 402-62-060.
- (3) Classification determined by long-lived radionuclides. If the waste contains only radionuclides listed in Table 1, classification shall be determined as follows:
- (a) If the concentration does not exceed 0.1 times the value in Table 1, the waste is Class A.
- (b) If the concentration exceeds 0.1 times the value in Table 1, the waste is Class C.
- (c) If the concentration exceeds the value in Table 1, the waste is not generally acceptable for near-surface disposal.
- (d) For waste containing mixtures of radionuclides listed in Table 1, the total concentration shall be determined by the sum of fractions rule described in subsection (7) of this section.

Table 1

	centration es/Cubic er	
C-14	8	
C-14 in activated metal	80	
Ni-59 in activated metal	220	
Nb-94 in activated metal	0.2	
Tc-99	3	
I-129	0.08	
Alpha emitting transuranic radionuclides	100¹	
with half-life greater than five years		
Pu-241	3,500 ¹	
Cm-242	$20,000^{1}$	
Ra-226	1001	

Units are nanocuries per gram, to convert to becquerels (Bq) per gram multiply by 37, to convert from curies to gigabecquerels (GBq) multiply by 37. Specific approval of the department is required for disposal of these radionuclides if their concentration is greater than ten percent of the Table 1 value.

- (4) Classification determined by short-lived radionuclides. If the waste does not contain any of the radionuclides listed in Table 1, classification shall be determined based on the concentrations shown in Table 2. If a nuclide is not listed in Table 2, it does not need to be considered in determining the waste class.
- (a) If the concentration does not exceed the value of Column 1, the waste is Class A.
- (b) If the concentration exceeds the value in Column 1, but does not exceed the value in Column 2, the waste is Class B.
- (c) If the concentration exceeds the value in Column 2, but does not exceed the value in Column 3, the waste is Class C.

- (d) If the concentration exceeds the value in Column 3, the waste is not generally acceptable for near-surface disposal.
- (e) For wastes containing mixtures of the radionuclides listed in Table 2, the total concentration shall be determined by the sum of fractions rule described in subsection (7) of this section.

Table 2

Radionuclide	Concentration, Curies/ Cubic Meter Column 1 Column 2 Column 3		
Total of all radionuclides with less then 5-year			
half-life	700	(*)	(*)
H-3	40	(*)	(*)
Ni-63	3.5	70	700
Ni-63 in activated metal	35	700	7,000
Sr-90	0.04	150	7,000
Cs-137	1	44	4,600

- (*) There are no limits established for these radionuclides in Class B or C wastes. Practical consideration such as the effects of external radiation and internal heat generation on transportation, handling, and disposal will limit the concentrations for these wastes. These wastes shall be Class B unless the concentrations of other radionuclides in Table 2 determine the waste to be Class C independent of these radionuclides. Specific approval of the department is required prior to packaging of Class B tritium waste.
- (5) <u>Classification determined by both long-lived and short-lived radionuclides</u>. If the waste contains a mixture of radionuclides, some of which are listed in Table 1, and some of which are listed in Table 2, classification shall be determined as follows:
- (a) If the concentration of a radionuclide listed in Table 1 is less than 0.1 times the value listed in Table 1, the class shall be that determined by the concentration of radionuclides listed in Table 2.
- (b) If the concentration of a radionuclide listed in Table 1 exceeds 0.1 times the value listed in Table 1, the waste shall be Class C, provided the concentration of radionuclides listed in Table 2 does not exceed the value shown in Column 3 of Table 2.
- (6) Classification of waste with radionuclides other than those listed in Tables 1 and 2. If the waste does not contain any radionuclides listed in either Table 1 or 2, it is Class A.
- (7) The sum of the fractions rule for mixtures of radionuclides. For determining classification for waste that contains a mixture of radionuclides, it is necessary to determine the sum of fractions by dividing each radionuclide's concentration by the appropriate limit and adding the resulting values. The appropriate limits must all be taken from the same column of the same table. The sum of the fractions for the column must be less than 1.0 if the waste class is to be determined by that column. Example: A waste contains Sr-90 in a concentration of 50 Ci/m³ and Cs-137 in a concentration of 22 Ci/m³. Since the concentrations both exceed the values in Column 1, Table 2, they must be compared to

Column 2 values. For Sr-90 fraction, 50/150 = 0.33; for Cs-137 fraction, 22/44 = 0.5; the sum of the fractions = 0.83. Since the sum is less than 1.0, the waste is Class B.

(8) Determination of concentration in wastes. The concentration of a radionuclide may be determined by indirect methods such as use of scaling factors which relate to the inferred concentration of one radionuclide to another that is measured, or radionuclide material accountability, if there is reasonable assurance that the indirect methods can be correlated with actual measurement. The concentration of a radionuclide may be averaged over the volume of the waste, or weight of the waste if the units are expressed as nanocuries per gram. Guidance on determining waste concentrations in "NRC Low-level Waste Licensing Branch Technical Position on Radioactive Waste Classification," May 1983.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–249–040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–62–050, filed 12/11/86.]

WAC 246-249-050 Acceptable radioactive waste forms and packaging. (1) Packaging.

- (a) Wastes shall be packaged in conformance with the conditions of the license issued to the site operator to which the waste will be shipped. Where the conditions of the site license are more restrictive than the provisions of these regulations, the site license condition shall govern. As a minimum, radioactive waste must be packaged in such a manner that waste containers received at the facility do not show:
 - (i) Significant deformation;
 - (ii) Loss or dispersal of contents;
- (iii) An increase in the external radiation levels recorded on the manifest, within instrument tolerances; or
- (iv) Significant containment degradation due to rust or other chemical actions.
- (b) Wastes shall not be packaged for disposal in cardboard or fiberboard. Wood boxes are prohibited after February 28, 1987.
- (c) A process control program shall be used which validates the following:
- (i) Liquid waste shall be packaged in sufficient approved absorbent material to absorb twice the volume of the liquid, solidified using an approved solidification agent, or stabilized using an approved stabilization agent.
- (ii) Solid wastes containing liquid shall contain as little free-standing and noncorrosive liquid as is reasonably achievable, but in no case shall the liquid exceed one percent of the volume.
- (d) Waste shall not be readily capable of detonation or of explosive decomposition or reaction at normal pressures and temperatures, or of explosive reaction with water.
- (e) Waste shall not contain, or be capable of generating quantities of toxic gases, vapors, or fumes harmful to persons transporting, handling, or disposing of the waste.

This does not apply to radioactive gaseous waste packaged in accordance with (g) of this subsection.

- (f) Pyrophoric materials contained in wastes shall be treated, prepared, and packaged to be nonflammable.
- (g) Waste in gaseous form must be packaged at a pressure that does not exceed 1.5 atmospheres at 20°C. Total activity shall not exceed 100 curies (3.7 x 10¹² Bqs) per container. Class A gaseous waste shall be contained within United States department of transportation specification cylinders. Specific approval of the department is required if the gaseous waste is Class B or C
- (h) Wastes containing hazardous, biological, pathegenic, or infectious material shall be treated to reduce the maximum extent practicable the potential hazard from the nonradiological materials. Void spaces within the waste and between the waste and its package shall be reduced to the extent practicable. Wastes subject to regulation under Resource Conservation and Recovery Act (RCRA) are not allowed at the disposal site.
- (i) Radioactive consumer products, the use and disposal of which is exempt from licensing control, may be received without regard to concentration limits of WAC 402-62-050 Table 2 provided the entire unit is received and is packaged with sufficient sorbent material so as to preclude breakage and rupture of its contents. This subsection allows the disposal of such consumer products as intact household or industrial smoke detector units containing Americium-241 foils and radium or radioactive materials incorporated into self-luminous devices and electron tubes.
- (2) The following requirements are intended to provide stability of the waste. Stability is intended to ensure that the waste does not degrade and affect overall stability of the site through slumping, collapse, or other failure of the disposal unit and thereby lead to water infiltration. Stability is also a factor in limiting exposure to an inadvertent intruder, since it provides a recognizable and nondispersible waste form.
- (a) Classes B, C, and A stable waste shall have structural stability. A structurally stable waste form will generally maintain its physical dimensions and its form, under the expected disposal conditions such as weight of overburden and compaction equipment, the presence of moisture, and microbial activity, and internal factors such as radiation effects and chemical changes. Structural stability can be provided by the waste form itself, processing the waste to a stable form, or placing the waste in a disposal container or structure that provides stability after disposal.
- (b) Notwithstanding the provisions in subsection (1)(c) and (d) of this section, liquid waste, or waste containing liquid, shall be converted into a form that contains as little free-standing and noncorrosive liquid as is reasonably achievable, but in no case shall the liquid exceed one percent of the volume of the waste when the waste is in a disposal container designed to ensure stability, or 0.5 percent of the volume of the waste for waste processed to a stable form.
- (c) Void spaces within all waste packages shall be avoided to the maximum extent practicable. In addition,

stable wastes shall be managed so that designed void spaces within packages represent no more than fifteen percent of the package volume.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-249-050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-62-060, filed 12/11/86.]

WAC 246-249-060 Labeling. The classification marking required by WAC 402-62-050 is in addition to any markings or labeling required by the United States Nuclear Regulatory Commission or the United States Department of Transportation and shall consist of lettering one-half inch high or greater in a durable contrasting color with the background surrounding the lettering. The classification marking shall be visible on the same side as the radioactive marking or label and in close proximity (within six inches). Waste packages marked "Radioactive," "Limited Quantity" or "Radioactive LSA" need only one classification marking whereas waste packages labeled White I, Yellow II, or Yellow III shall have classification markings in close proximity (within six inches) to each label.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-249-060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-62-070, filed 12/11/86.]

WAC 246-249-070 Variances. It is inevitable that a small portion of wastes cannot be treated to fully comply with the waste form requirements of this chapter consistent with the ALARA philosophy of chapter 402-10 WAC. A waste disposal site operator may apply to the department for a variance provided:

- (1) The variance requested is not for a continuing process or waste stream;
- (2) An equivalent or greater degree of protection is provided by the proposed alternative; and
- (3) All reasonable methods of complying with the existing requirement have been considered.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-249-070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-62-080, filed 12/11/86.]

WAC 246-249-080 Transfer for disposal and manifests. (1) Each shipment of waste to a licensed land disposal facility shall be accompanied by a shipment manifest that contains the name, address, and telephone number of the person generating the waste. The manifest shall also include the name, address, and telephone number of the person transporting the waste to the land disposal facility. The manifest shall also indicate as completely as practicable: A physical description of the waste; the waste volume; radionuclide identity and quantity; the total radioactivity; and the principal chemical form. The solidification agent shall be specified. Wastes containing more than 0.1 percent chelating agents by weight shall be identified and the weight percentage of the chelating agent estimated. Wastes classified as Class A, Class B, or Class C in WAC 402-62-050 shall be clearly identified as such in the manifest.

The total quantity of the radionuclides H-3, C-14, Tc-99 and I-129 must be shown.

- (2) The manifest required in subsection (1) of this section may be shipping papers used to meet United States Department of Transportation or United States Environmental Protection Agency regulations or requirements of the receiver, provided all of the required information is included.
- (3) Each manifest shall include a certification by the waste generator that the transported materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the United States Department of Transportation and the agency. An authorized representative of the waste generator shall sign and date the manifest.
- (4) Any generator licensee who transfers waste to a land disposal facility or a licensed waste collector shall comply with the following requirements. Any licensee who transfers waste to a licensed waste processor who treats or repackages waste shall comply with the requirements of (d) through (h) of this subsection. A licensee shall:
- (a) Prepare all wastes so the waste is classified according to WAC 402-62-050 and meets the waste characteristics requirements in WAC 402-62-060.
- (b) Label each package of waste to identify whether it is a Class A waste, Class B waste or Class C waste, in accordance with WAC 402-62-050;
- (c) Conduct a quality control program to assure compliance with WAC 402-62-050 and 402-62-060; the program must include management evaluation of audits;
- (d) Prepare shipping manifests to meet the requirements of subsections (1) and (3) of this section;
- (e) Forward a copy of the manifest to the intended recipient, at the time of shipment; or, deliver to a broker at the time the waste is collected, obtaining acknowledgement of receipt in the form of a signed copy of the manifest from the broker;
- (f) Include one copy of the manifest with the shipment;
- (g) Retain a copy of the manifest with documentation of acknowledgement of receipt as the record of transfer of licensed material as required by these regulations;
- (h) For any shipments or any part of a shipment for which acknowledgement of receipt has not been received within the times set forth in this section, conduct an investigation in accordance with subsection (8) of this section.
- (5) Any waste broker licensee who handles prepackaged waste shall:
- (a) Acknowledge receipt of the waste from the generator within one week of receipt by returning a signed copy of the manifest.
- (b) Prepare a new manifest to reflect consolidated shipments; the new manifest shall serve as a listing or index for the detailed generator manifests. Copies of the generator manifests shall be a part of the new manifest.

The waste broker may prepare a new manifest without attaching the generator manifests, provided the new manifest contains for each package the information specified in subsection (2) of this section. The broker licensee shall certify that nothing has been done to the waste which would invalidate the generator's certification.

- (c) Forward a copy of the new manifest to the land disposal facility operator at the time of shipment;
- (d) Include the new manifest with the shipment to the disposal site.
- (e) Retain a copy of the manifest with documentation of acknowledgement of receipt as the record of transfer of licensed material as required by these regulations, and retain information from generator manifests as required by these regulations, and retain information from generator manifests until disposition is authorized by the agency; and
- (f) For any shipments or any part of a shipment for which acknowledgement of receipt is not received within the times set forth in this section, conduct an investigation in accordance with subsection (8) of this section.
- (6) Any licensed waste processor who treats or repackages wastes shall:
- (a) Acknowledge receipt of the waste from the generator within one week of receipt by returning a signed copy of the manifest.
- (b) Prepare a new manifest that meets the requirements of subsections (1), (2), and (3) of this section. Preparation of the new manifest reflects that the processor is responsible for the waste;
- (c) Prepare all wastes so that the waste is classified according to WAC 402-62-050 and meets the waste characteristics requirement in WAC 402-62-060.
- (d) Label each package of waste to identify whether it is Class A waste, Class B waste, or Class C waste, in accordance with WAC 402-62-050 and 402-62-070.
- (e) A quality control program shall be conducted to assure compliance with WAC 402-62-050 and 402-62-060. The program shall include management evaluation of audits;
- (f) Forward a copy of the new manifest to the disposal site operator or waste broker at the time of shipment, or deliver to a broker at the time the waste is collected, obtaining acknowledgement of receipt in the form of a signed copy of the manifest by the broker.
 - (g) Include the new manifest with the shipment:
- (h) Retain copies of the original manifests and new manifests with documentation of acknowledgement of receipt as the record of transfer of licensed material required by these regulations.
- (i) For any shipment or part of a shipment for which acknowledgement is not received within the times set forth in this section, conduct an investigation in accordance with subsection (8) of this section.
 - (7) The land disposal facility operator shall:
- (a) Acknowledge receipt of the waste within one week of receipt by returning a signed copy of the manifest to the shipper. The shipper to be notified is the licensee who last possessed the waste and transferred the waste to the operator. The returned copy of the manifest shall indicate any discrepancies between materials listed on the manifest and materials received;

- (b) Maintain copies of all completed manifests until the agency authorizes their disposition; and
- (c) Notify the shipper (i.e., the generator or the broker) and the agency when any shipment or part of a shipment has not arrived within sixty days after the advanced manifest was received.
- (8) Any shipment or part of a shipment for which acknowledgement is not received within the time set forth in this section must:
- (a) Be investigated by the shipper if the shipper has not received notification of receipt within twenty days after transfer; and
- (b) Be traced and reported. The investigation shall include tracing the shipment and filing a report with the agency. Each licensee who conducts a trace investigation shall file a written report with the agency within two weeks of completion of the investigation.

[Statutory Authority: RCW 43.70.040, 91-02-049 (Order 121), recodified as § 246-249-080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-62-090, filed 12/11/86.]

Chapter 246-250 WAC RADIOACTIVE WASTE--LICENSING LAND DISPOSAL

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GENERAL PROVISIONS

- WAC 246-250-001 Purpose and scope. (1) The regulations in this chapter establish procedures, criteria, and terms and conditions upon which the department issues licenses for land disposal of low-level radioactive wastes received from other persons. (Applicability of the requirements in this chapter to department licenses for waste disposal facilities in effect on the effective date of this regulation will be determined on a case-by-case basis and implemented through terms and conditions of the license or by orders issued by the department.) The requirements of this chapter are in addition to, and not in substitution for, other applicable requirements of these regulations or other state regulations.
- (2) The regulations in this chapter do not apply to disposal of by-product material as defined in WAC 402-12-050 (6)(b) or disposal of waste as provided in WAC 402-24-050, 402-24-140, or 402-24-150.
- (3) This chapter establishes procedural requirements and performance objectives applicable to any method of land disposal. It establishes specific technical requirements for near-surface disposal of radioactive waste which involves disposal in the uppermost portion of the earth.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–010, filed 12/11/86.]

WAC 246-250-010 Definitions. As used in this chapter, the following definitions apply:

- (1) "Active maintenance" means any significant activity needed during the period of institutional control to maintain a reasonable assurance that the performance objectives of WAC 402-61-180 and 402-61-190 are met. Such active maintenance includes ongoing activities such as the pumping and treatment of water from a disposal unit or one-time measures such as replacement of a disposal unit cover. Active maintenance does not include custodial activities such as repair of fencing, repair or replacement of monitoring equipment, revegetation, minor additions to soil cover, minor repair of disposal unit covers, and general disposal site upkeep such as mowing grass.
- (2) "Buffer zone" means a portion of the disposal site that is controlled by the licensee or by the United States Department of Energy and that lies under the disposal units and between the disposal units and the boundary of the site.
- (3) "Chelating agent" means amine polycarboxylic acids, hydroxy-carboxylic acids, gluconic acid, and polycarboxylic acids.
- (4) "Commencement of construction" means any clearing of land, excavation, or other substantial action

- that would adversely affect the environment of a land disposal facility. The term does not mean disposal site exploration, necessary roads for disposal site exploration, borings to determine foundation conditions, or other preconstruction monitoring or testing to establish background information related to the suitability of the disposal site or the protection of environmental values.
- (5) "Custodial agency" means an agency of the government designated to act on behalf of the government owner of the disposal site.
- (6) "Disposal" means the isolation of wastes from the biosphere inhabited by man and his food chains by emplacement in a land disposal facility.
- (7) "Disposal site" means that portion of a land disposal facility which is used for disposal of waste. It consists of disposal units and a buffer zone.
- (8) "Disposal unit" means a discrete portion of the disposal site into which waste is placed for disposal. For near-surface disposal, the unit is usually a trench.
- (9) "Engineered barrier" means a man-made structure or device that is intended to improve the land disposal facility's ability to meet the performance objectives in this chapter.
- (10) "Explosive material" means any chemical compound, mixture, or device which produces a substantial instantaneous release of gas and heat spontaneously or by contact with sparks or flame.
- (11) "Hazardous waste" means those wastes designated as hazardous by United States Environmental Protection Agency regulations in 40 CFR Part 261.
- (12) "Hydrogeologic unit" means any soil or rock unit or zone which by virtue of its porosity or permeability, or lack thereof, has a distinct influence on the storage or movement of groundwater.
- (13) "Inadvertent intruder" means a person who might occupy the disposal site after closure and engage in normal activities, such as agriculture, dwelling construction, or other pursuits in which an individual might be unknowingly exposed to radiation from the waste.
- (14) "Intruder barrier" means a sufficient depth of cover over the waste that inhibits contact with waste and helps to ensure that radiation exposures to an inadvertent intruder will meet the performance objectives set forth in this chapter or engineered structures that provide equivalent protection to the inadvertent intruder.
- (15) "Land disposal facility" means the land, buildings, and equipment which are intended to be used for the disposal of wastes into the subsurface of the land.
- (16) "Monitoring" means observing and making measurements to provide data to evaluate the performance and characteristics of the disposal site.
- (17) "Near-surface disposal facility" means a land disposal facility in which waste is disposed within approximately the upper thirty meters of the earth's surface.
- (18) "Pyrophoric liquid" means any liquid that ignites spontaneously in dry or moist air at or below 130°F (54.4°C).
- (19) "Pyrophoric solid" means any solid material, other than one classed as an explosive, which under normal conditions, is liable to cause fires through friction,

retained heat from manufacturing or processing, or which can be ignited readily and, when ignited, burns so vigorously and persistently as to create a serious transportation, handling, or disposal hazard. Included are spontaneously combustible and water—reactive materials.

- (20) "Site closure and stabilization" means those actions that are taken upon completion of operations that prepare the disposal site for custodial care and that assure that the disposal site will remain stable and will not need ongoing active maintenance.
 - (21) "Stability" means structural stability.
- (22) "Surveillance" means monitoring and observation of the disposal site for purposes of visual detection of need for maintenance, custodial care, evidence of intrusion, and compliance with other license and regulatory requirements.
- (23) "Waste" means those low-level radioactive wastes that are acceptable for disposal in a land disposal facility. For the purposes of this definition, low-level waste has the same meaning as in the Low-Level Radioactive Waste Policy Act, Public Law 96-573, that is, radioactive waste not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or by-product material as defined in section 11 e.(2) of the Atomic Energy Act (uranium or thorium tailings and waste).

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–020, filed 12/11/86.]

- WAC 246-250-020 License required. (1) No person may receive, possess, or dispose of waste received from other persons at a land disposal facility unless authorized by a license issued by the department pursuant to this chapter, and chapter 402-22 WAC.
- (2) Each person shall file an application with the department pursuant to chapter 402–22 WAC and obtain a license as provided in this chapter before commencement of construction of a land disposal facility. Failure to comply with this requirement may be grounds for denial of a license.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-250-020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-61-030, filed 12/11/86.]

WAC 246-250-030 Content of application. In addition to the requirements set forth in chapter 402-22 WAC, an application to receive from others, possess, and dispose of wastes shall consist of general information, specific technical information, institutional information, and financial information as set forth in WAC 402-61-050 through 402-61-090.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-250-030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-61-040, filed 12/11/86.]

WAC 246-250-040 General information. The general information shall include each of the following:

- (1) Identity of the applicant including:
- (a) The full name, address, telephone number, and description of the business or occupation of the applicant;
- (b) If the applicant is a partnership, the name and address of each partner and the principal location where the partnership does business;
- (c) If the applicant is a corporation or an unincorporated association, (i) the state where it is incorporated or organized and the principal location where it does business, and (ii) the names and addresses of its directors and principal officers; and
- (d) If the applicant is acting as an agent or representative of another person in filing the application, all information required under this subsection must be supplied with respect to the other person.
 - (2) Qualifications of the applicant:
- (a) The organizational structure of the applicant, both offsite and onsite, including a description of lines of authority and assignments of responsibilities, whether in the form of administrative directives, contract provisions, or otherwise;
- (b) The technical qualifications, including training and experience, of the applicant and members of the applicant's staff to engage in the proposed activities. Minimum training and experience requirements for personnel filling key positions described in (a) of this subsection must be provided.
- (c) A description of the applicant's personnel training program; and
- (d) The plan to maintain an adequate complement of trained personnel to carry out waste receipt, handling, and disposal operations in a safe manner.
 - (3) A description of:
 - (a) The location of the proposed disposal site;
 - (b) The general character of the proposed activities;
- (c) The types and quantities of waste to be received, possessed, and disposed of;
- (d) Plans for use of the land disposal facility for purposes other than disposal of wastes; and
 - (e) The proposed facilities and equipment.
- (4) Proposed schedules for construction, receipt of waste, and first emplacement of waste at the proposed land disposal facility.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–050, filed 12/11/86.]

WAC 246-250-050 Specific technical information. The specific technical information shall include the following information needed for demonstration that the performance objectives and the applicable technical requirements of this chapter will be met. The specific technical information shall be in the form of an environmental report which the department can use to independently evaluate the project under the provisions of the State Environmental Policy Act (SEPA):

(1) A description of the natural and demographic disposal site characteristics as determined by disposal site selection and characterization activities. The description

shall include geologic, geochemical, geotechnical, hydrologic, ecologic, archaeologic, meteorologic, climatologic, and biotic features of the disposal site and vicinity.

- (2) A description of the design features of the land disposal facility and the disposal units. For near—surface disposal, the description shall include those design features related to infiltration of water; integrity of covers for disposal units; structural stability of backfill, wastes, and covers; contact of wastes with standing water; disposal site drainage; disposal site closure and stabilization; elimination to the extent practicable of long—term disposal site maintenance; inadvertent intrusion; occupational exposures; disposal site monitoring; and adequacy of the size of the buffer zone for monitoring and potential mitigative measures.
- (3) A description of the principal design criteria and their relationship to the performance objectives.
- (4) A description of the design basis natural events or phenomena and their relationship to the principal design criteria.
- (5) A description of codes and standards which the applicant has applied to the design and which will apply to construction of the land disposal facilities.
- (6) A description of the construction and operation of the land disposal facility. The description shall include as a minimum the methods of construction of disposal units; waste emplacement; the procedures for and areas of waste segregation; types of intruder barriers; onsite traffic and drainage systems; survey control program; methods and areas of waste storage; and methods to control surface water and groundwater access to the wastes. The description shall also include a description of the methods to be employed in the handling and disposal of wastes containing chelating agents or other nonradiological substances that might affect meeting the performance objectives of this chapter.
- (7) A description of the disposal site closure plan, including those design features which are intended to facilitate disposal site closure and to eliminate the need for ongoing active maintenance.
- (8) An identification of the known natural resources at the disposal site, whose exploitation could result in inadvertent intrusion into the wastes after removal of active institutional control.
- (9) A description of the kind, amount, classification, and specifications of the radioactive material proposed to be received, possessed, and disposed of at the land disposal facility.
- (10) A description of the quality control program for the determination of natural disposal site characteristics and for quality control during the design, construction, operation, and closure of the land disposal facility and the receipt, handling, and emplacement of waste. Audits and managerial controls must be included.
- (11) A description of the radiation safety program for control and monitoring of radioactive effluents to ensure compliance with the performance objective in WAC 402-61-180 and occupational radiation exposure to ensure compliance with the requirements of chapter 402-24 WAC and to control contamination of personnel, vehicles, equipment, buildings, and the disposal site. Both

routine operations and accidents shall be addressed. The program description must include procedures, instrumentation, facilities, and equipment.

- (12) A description of the environmental monitoring program to provide data to evaluate potential health and environmental impacts and the plan for taking corrective measures if migration is indicated.
- (13) A description of the administrative procedures that the applicant will apply to control activities at the land disposal facility.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–060, filed 12/11/86.]

- WAC 246-250-060 Technical analyses. The specific technical information shall also include the following analyses needed to demonstrate that the performance objectives of this chapter will be met:
- (1) Pathways analyzed in demonstrating protection of the general population from releases of radioactivity shall include air, soil, groundwater, surface water, plant uptake, and exhumation by burrowing animals. The analyses shall clearly identify and differentiate between the roles performed by the natural disposal site characteristics and design features in isolating and segregating the wastes. The analyses shall clearly demonstrate that there is reasonable assurance that the exposures to humans from the release of radioactivity will not exceed the limits set forth in WAC 402-61-180.
- (2) Analyses of the protection of individuals from inadvertent intrusion shall include demonstration that there is reasonable assurance the waste classification and segregation requirements will be met and that adequate barriers to inadvertent intrusion will be provided.
- (3) Analyses of the protection of individuals during operations shall include assessments of expected exposures due to routine operations and likely accidents during handling, storage, and disposal of waste. The analyses shall provide reasonable assurance that exposures will be controlled to meet the requirements of chapter 402–24 WAC.
- (4) Analyses of the long-term stability of the disposal site and the need for ongoing active maintenance after closure shall be based upon analyses of active natural processes such as erosion, mass wasting, slope failure, settlement of wastes and backfill, infiltration through covers over disposal areas and adjacent soils, and surface drainage of the disposal site. The analyses shall provide reasonable assurance that there will not be a need for ongoing active maintenance of the disposal site following closure.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-250-060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-61-070, filed 12/11/86.]

WAC 246-250-070 Institutional information. The institutional information submitted by the applicant shall include:

(1) A certification by the federal or state agency which owns the disposal site that the federal or state

agency is prepared to accept transfer of the license when the provisions of WAC 402-61-150 are met and will assume responsibility for institutional control after site closure and postclosure observation and maintenance.

(2) Where the proposed disposal site is on land not owned by the federal or state government, the applicant shall submit evidence that arrangements have been made for assumption of ownership in fee by the federal or state agency before the department issues a license.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-250-070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-61-080, filed 12/11/86.]

WAC 246-250-080 Financial information. The financial information shall be sufficient to demonstrate that the financial qualifications of the applicant are adequate to carry out the activities for which the license is sought and meet other financial assurance requirements of this chapter.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-250-080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-61-090, filed 12/11/86.]

- WAC 246-250-090 Requirements for issuance of a license. A license for the receipt, possession, and disposal of waste containing or contaminated with radioactive material will be issued by the department upon finding that:
- (1) The issuance of the license will not constitute an unreasonable risk to the health and safety of the public;
- (2) The applicant is qualified by reason of training and experience to carry out the disposal operations requested in a manner that protects health and minimizes danger to life or property;
- (3) The applicant's proposed disposal site, disposal design, land disposal facility operations, including equipment, facilities, and procedures, disposal site closure, and postclosure institutional control are adequate to protect the public health and safety in that they provide reasonable assurance that the general population will be protected from releases of radioactivity as specified in the performance objective in WAC 402-61-180.
- (4) The applicant's proposed disposal site, disposal site design, land disposal facility operations, including equipment, facilities, and procedures, disposal site closure, and postclosure institutional control are adequate to protect the public health and safety in that they will provide reasonable assurance that individual inadvertent intruders are protected in accordance with the performance objective in WAC 402-61-190.
- (5) The applicant's proposed land disposal facility operations, including equipment, facilities, and procedures, are adequate to protect the public health and safety in that they will provide reasonable assurance that the standards for radiation protection set out in chapter 402–24 WAC will be met;
- (6) The applicant's proposed disposal site, disposal site design, land disposal facility operations, disposal site closure, and postclosure institutional control are adequate to protect the public health and safety in that they

- will provide reasonable assurance that long-term stability of the disposed waste and the disposal site will be achieved and will eliminate to the extent practicable the need for ongoing active maintenance of the disposal site following closure;
- (7) The applicant's demonstration provides reasonable assurance that the applicable technical requirements of this chapter will be met;
- (8) The applicant's proposal for institutional control provides reasonable assurance that such control will be provided for the length of time found necessary to ensure the findings in subsections (3) through (6) of this section and that the institutional control meets the requirements of WAC 402-61-270.
- (9) The financial or surety arrangements meet the requirements of this chapter.
- (10) The provisions of the State Environmental Policy Act have been met.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–100, filed 12/11/86.]

- WAC 246-250-100 Conditions of licenses. (1) A license issued under this chapter, or any right thereunder, may be transferred, assigned, or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of the license to any person, only if the department finds, after securing full information, that the transfer is in accordance with the provisions of the act and gives its consent in writing in the form of a license amendment.
- (2) The licensee shall submit written statements under oath upon request of the department, at any time before termination of the license, to enable the department to determine whether the license should be modified, suspended, or revoked.
- (3) The license will be terminated only on the full implementation of the final closure plan as approved by the department, including postclosure observation and maintenance.
- (4) The licensee shall be subject to the provisions of the act, now or hereafter in effect, and to all rules, regulations, and orders of the department. The terms and conditions of the license are subject to amendment, revision, or modification, by reason of amendments to, or by reason of rules, regulations, and orders issued in accordance with the terms of the act.
- (5) Each person licensed by the department pursuant to the regulations in this chapter shall confine possession and use of materials to the locations and purposes authorized in the license.
- (6) The licensee shall not dispose of waste until the department has inspected the land disposal facility and has found it to be in conformance with the description, design, and construction described in the application for a license.
- (7) The department may incorporate in any license at the time of issuance, or thereafter, by appropriate rule, regulation, or order, additional requirements and conditions with respect to the licensee's receipt, possession,

and disposal of waste as it deems appropriate or necessary in order to:

- (a) Protect health or to minimize danger to life or property;
- (b) Require reports and the keeping of records, and to provide for inspections of activities under the license that may be necessary or appropriate to effectuate the purposes of the act and regulations thereunder.
- (8) The authority to dispose of wastes expires on the date stated in the license. Any expiration date on a license applies only to the above ground activities and to the authority to dispose of waste. Failure to renew the license shall not relieve the licensee of responsibility for implementing site closure, postclosure observation, and transfer of the license to the site owner.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-250-100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-61-110, filed 12/11/86.]

- WAC 246-250-110 Application for renewal or closure. (1) An application for renewal must be filed at least ninety days prior to license expiration.
- (2) An application for closure under WAC 402-61-130 must be filed at least one year prior to proposed closure.
- (3) Applications for renewal of a license must be filed in accordance with WAC 402-61-040 through 402-61-090. Applications for closure must be filed in accordance with WAC 402-61-130. Information contained in previous applications, statements, or reports filed with the department under the license may be incorporated by reference if the references are clear, specific, and remain pertinent.
- (4) In any case in which a licensee has filed an application in proper form for renewal of a license, the license shall not expire until the department has taken final action on the application for renewal.
- (5) In determining whether a license will be renewed, the department will apply the criteria set forth in WAC 402-61-100.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–120, filed 12/11/86.]

- WAC 246-250-120 Contents of application for site closure and stabilization. (1) Prior to final closure of the disposal site, or as otherwise directed by the department, the applicant shall submit an application to amend the license for closure. This closure application shall include a final revision and specific details of the disposal site closure plan included as part of the license application submitted under WAC 402-61-060(7) that includes each of the following:
- (a) Any additional geologic, hydrologic, or other data pertinent to the long-term containment of emplaced wastes obtained during the operational period.
- (b) The results of tests, experiments, or any other analyses relating to backfill of excavated areas, closure and sealing, waste migration and interaction with

emplacement media, or any other tests, experiments, or analysis pertinent to the long-term containment of emplaced waste within the disposal site.

- (c) Any proposed revision of plans for:
- (i) Decontamination and/or dismantlement of surface facilities;
 - (ii) Backfilling of excavated areas; or
- (iii) Stabilization of the disposal site for postclosure care.
- (d) Any significant new information regarding the environmental impact of closure activities and long-term performance of the disposal site.
- (2) Upon review and consideration of an application to amend the license for closure submitted in accordance with subsection (1) of this section the department shall issue an amendment authorizing closure if there is reasonable assurance that the long-term performance objectives of this chapter will be met.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–120, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–130, filed 12/11/86.]

WAC 246-250-130 Postclosure observation and maintenance. The licensee shall observe, monitor, and carry out necessary maintenance and repairs at the disposal site until the site closure is complete and the license is transferred by the department in accordance with WAC 402-61-150. Responsibility for the disposal site must be maintained by the licensee for five years. A shorter or longer time period for postclosure observation and maintenance may be established and approved as part of the site closure plan, based on site-specific conditions.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as \$246-250-130, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), \$402-61-140, filed 12/11/86.]

- WAC 246-250-140 Transfer of license. Following closure and the period of postclosure observation and maintenance, the licensee may apply for an amendment to transfer the license to the disposal site owner. The license shall be transferred when the department finds:
- (1) That the closure of the disposal site has been made in conformance with the licensee's disposal site closure plan, as amended and approved as part of the license;
- (2) That reasonable assurance has been provided by the licensee that the performance objectives of this chapter are met;
- (3) That any funds and necessary records for care ill be transferred to the disposal site owner;
- (4) That the postclosure monitoring program is operational for implementation by the disposal site owner; and
- (5) That the federal or state agency which will assume responsibility for institutional control of the disposal site is prepared to assume responsibility and ensure that the institutional requirements found necessary under WAC 402-61-100(8) will be met.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-250-140, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-61-150, filed 12/11/86.]

WAC 246-250-150 Termination of license. (1) Following any period of institutional control needed to meet the requirements found necessary under WAC 402-61-100, the licensee may apply for an amendment to terminate the license.

- (2) This application will be reviewed in accordance with the provisions of chapter 402-22 WAC.
- (3) A license shall be terminated only when the department finds:
- (a) That the institutional control requirements found necessary under WAC 402-61-100(8) have been met;
- (b) That any additional requirements resulting from new information developed during the institutional control period have been met; and
- (c) That permanent monuments or markers warning against intrusion have been installed.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–150, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–160, filed 12/11/86.]

WAC 246-250-160 General requirement. Land disposal facilities shall be sited, designed, operated, closed, and controlled after closure so that reasonable assurance exists that exposures to individuals are within the requirements established in the performance objectives in WAC 402-61-180 through 402-61-210.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-250-160, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-61-170, filed 12/11/86.]

WAC 246-250-170 Protection of the general population from releases of radioactivity. Concentrations of radioactive material which may be released to the general environment in groundwater, surface water, air, soil, plants, or animals shall not result in an annual dose exceeding an equivalent of twenty-five millirems (0.25 mSv) to the whole body, seventy-five millirems (0.75 mSv) to the thyroid, and twenty-five millirems (0.25 mSv) to any other organ of any member of the public. Reasonable effort should be made to maintain releases of radioactivity in effluents to the general environment as low as is reasonably achievable.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-250-170, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-61-180, filed 12/11/86.]

WAC 246-250-180 Protection of individuals from inadvertent intrusion. Design, operation, and closure of the land disposal facility shall ensure protection of any individual inadvertently intruding into the disposal site and occupying the site or contacting the waste at any time after active institutional controls over the disposal site are removed.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–180, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–190, filed 12/11/86.]

WAC 246-250-190 Protection of individuals during operations. After the effective date of these regulations, operations at the land disposal facility shall be conducted in compliance with the standards for radiation protection set out in chapter 402-24 WAC, except for releases of radioactivity in effluents from the land disposal facility, which shall be governed by WAC 402-61-180. Every reasonable effort should be made to maintain radiation exposures as low as is reasonably achievable.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–190, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–200, filed 12/11/86.]

WAC 246-250-200 Stability of the disposal site after closure. The disposal facility shall be sited, designed, used, operated, and closed to achieve long-term stability of the disposal site and to eliminate, to the extent practicable, the need for ongoing active maintenance of the disposal site following closure so that only surveillance, monitoring, or minor custodial care is required.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–200, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–210, filed 12/11/86.]

TECHNICAL REQUIREMENTS FOR LAND DISPOSAL FACILITIES

WAC 246-250-300 Disposal site suitability requirements for land disposal. (1) Disposal site suitability for near-surface disposal. The primary emphasis in disposal site suitability is given to isolation of wastes, and to disposal site features that ensure that the long-term performance objectives are met.

- (a) The disposal site shall be capable of being characterized, modeled, analyzed, and monitored.
- (b) Within the region where the facility is to be located, a disposal site should be selected so that projected population growth and future developments are not likely to affect the ability of the disposal facility to meet the performance objectives of this chapter.
- (c) Areas shall be avoided having known natural resources which, if exploited, would result in failure to meet the performance objectives of this chapter.
- (d) The disposal site shall be generally well drained and free of areas of flooding or frequent ponding. Waste disposal shall not take place in a one hundred-year flood plain, coastal high-hazard area or wetland, as defined in Executive Order 11988, "Flood Plain Management Guidelines."
- (e) Upstream drainage areas shall be minimized to decrease the amount of runoff which could erode or inundate waste disposal units.
- (f) The disposal site shall provide sufficient depth to the water table that groundwater intrusion, perennial or otherwise, into the waste will not occur. The department

will consider an exception to this requirement to allow disposal below the water table if it can be conclusively shown that disposal site characteristics will result in molecular diffusion being the predominant means of radionuclide movement and the rate of movement will result in the performance objectives being met. In no case will waste disposal be permitted in the zone of fluctuation of the water table.

- (g) The hydrogeologic unit used for disposal shall not discharge groundwater to the surface, except for groundwater monitoring operations.
- (h) Areas shall be avoided where tectonic processes such as faulting, folding, seismic activity, or vulcanism may occur with such frequency and extent to significantly affect the ability of the disposal site to meet the performance objectives of this chapter or may preclude defensible modeling and prediction of long-term impacts.
- (i) Areas shall be avoided where surface geologic processes such as mass wasting, erosion, slumping, landsliding, or weathering occur with such frequency and extent to significantly affect the ability of the disposal site to meet the performance objectives of this chapter, or may preclude defensible modeling and prediction of long-term impacts.
- (j) An existing disposal site may be located where nearby facilities or activities could adversely impact the ability of the site to meet the performance objectives of this chapter or significantly mask the environmental monitoring program, provided an extensive environmental monitoring program exists which is designed to differentiate, to the maximum extent practicable, between contributions from the disposal site and other nearby facilities.

(2) (Reserved.)

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–300, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–220, filed 12/11/86.]

WAC 246-250-320 Disposal site design for land disposal. (1) Disposal site design for near-surface disposal.

- (a) Site design features shall be directed toward longterm isolation and avoidance of the need for continuing active maintenance after site closure.
- (b) The disposal site design and operation shall be compatible with the disposal site closure and stabilization plan and lead to disposal site closure that provides reasonable assurance that the performance objectives will be met.
- (c) The disposal site shall be designed to complement and improve, where appropriate, the ability of the disposal site's natural characteristics to assure that the performance objectives will be met.
- (d) Covers shall be designed to minimize to the extent practicable water infiltration, to direct percolating or surface water away from the disposed waste, and to resist degradation by surface geologic processes and biotic activity.

- (e) Surface features shall direct surface water drainage away from disposal units at velocities and gradients which will not result in erosion that will require ongoing active maintenance in the future.
- (f) The disposal site shall be designed to minimize to the extent practicable the contact of water with waste during storage, the contact of standing water with waste during disposal, and the contact of percolating or standing water with wastes after disposal.

(2) (Reserved.)

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–320, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–230, filed 12/11/86.]

WAC 246-250-330 Land disposal facility operation and disposal site closure. (1) Near-surface disposal facility operation and disposal site closure.

- (a) Wastes designated as Class A pursuant to chapter 402–24 WAC shall be segregated from other wastes by placing in disposal units which are sufficiently separated from disposal units for the other waste classes so that any interaction between Class A wastes and other wastes will not result in the failure to meet the performance objectives of this chapter. This segregation is not necessary for Class A wastes if they meet the stability requirements in chapter 402–24 WAC.
- (b) Wastes designated as Class C pursuant to chapter 402–24 WAC shall be disposed of so that the top of the waste is a minimum of five meters below the top surface of the cover or must be disposed of with intruder barriers that are designed to protect against an inadvertent intrusion for at least five hundred years.
- (c) Except as provided in (l) of this subsection, only waste classified as Class A, B, or C shall be acceptable for near-surface disposal. All waste shall be disposed of in accordance with the requirements of (d) through (k) of this subsection.
- (d) Wastes shall be emplaced in a manner that maintains the package integrity during emplacement, minimizes the void spaces between packages, and permits the void spaces to be filled.
- (e) Void spaces between waste packages shall be filled with earth or other material to reduce future subsidence within the fill.
- (f) Waste shall be placed and covered in a manner that limits the radiation dose rate at the surface of the cover to levels that at a minimum will permit the licensee to comply with all provisions of chapter 402–24 WAC at the time the license is transferred pursuant to WAC 402–61–150.
- (g) The boundaries and locations of each disposal unit shall be accurately located and mapped by means of a land survey. Near-surface disposal units shall be marked in such a way that the boundaries of each unit can be easily defined. Three permanent survey marker control points, referenced to United States Geological Survey (USGS) or National Geodetic Survey (NGS) survey control stations, shall be established on the site to facilitate surveys. The USGS or NGS control stations shall

provide horizontal and vertical controls as checked against USGS or NGS record files.

- (h) A buffer zone of land shall be maintained between any buried waste and the disposal site boundary and beneath the disposed waste. The buffer zone shall be of adequate dimensions to carry out environmental monitoring activities specified in WAC 402-61-250(4) and take mitigative measures if needed.
- (i) Closure and stabilization measures as set forth in the approved site closure plan shall be carried out as each disposal unit is filled and covered.
- (j) Active waste disposal operations shall not have an adverse effect on completed closure and stabilization measures.
- (k) Only wastes containing or contaminated with radioactive material shall be disposed of at the disposal site.
- (1) Proposals for disposal of waste that is not generally acceptable for near-surface disposal because the waste form and disposal methods must be different and, in general, more stringent than those specified for Class C waste, may be submitted to the department for approval.
 - (2) (Reserved.)

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–330, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–240, filed 12/11/86.]

WAC 246-250-340 Environmental monitoring. (1) At the time a new license application is submitted, the applicant shall have conducted a preoperational monitoring program to provide basic environmental data on the disposal site characteristics. The applicant shall obtain information about the ecology, meteorology, climate, hydrology, geology, geochemistry, and seismology of the disposal site. For those characteristics that are subject to seasonal variation, data must cover at least a twelve—month period.

- (2) During the land disposal facility site construction and operation, the licensee shall maintain an environmental monitoring program. Measurements and observations must be made and recorded to provide data to evaluate the potential health and environmental impacts during both the construction and the operation of the facility and to enable the evaluation of long-term effects and the need for mitigative measures. The monitoring system must be capable of providing early warning of releases of waste from the disposal site before they leave the site boundary.
- (3) After the disposal site is closed, the licensee responsible for postoperational surveillance of the disposal site shall maintain a monitoring system based on the operating history and the closure and stabilization of the disposal site. The monitoring system must be capable of providing early warning of releases of waste from the disposal site before they leave the site boundary.
- (4) The licensee shall have plans for taking corrective measures if the environmental monitoring program detects migration of waste which would indicate that the performance objectives may not be met.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-250-340, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-61-250, filed 12/11/86.]

WAC 246-250-350 Alternative requirements for design and operations. The department may, upon request or on its own initiative, authorize provisions other than those set forth in WAC 402-61-220 through 402-61-250 for the segregation and disposal of waste and for the design and operation of a land disposal facility on a specific basis, if it finds reasonable assurance of compliance with the performance objectives of this chapter.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–350, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–260, filed 12/11/86.]

- WAC 246-250-360 Institutional requirements. (1) Land ownership. Disposal of waste received from other persons may be permitted only on land owned in fee by the federal or state government.
- (2) Institutional control. The land owner or custodial agency shall conduct an institutional control program to physically control access to the disposal site following transfer of control of the disposal site from the disposal site operator. The institutional control program shall also include, but not be limited to, conducting an environmental monitoring program at the disposal site, periodic surveillance, minor custodial care, and other requirements as determined by the department; and administration of funds to cover the costs for these activities. The period of institutional controls will be determined by the department, but controls may not be relied upon for more than one hundred years following transfer of institutional control of the disposal site to the owner.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–360, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–270, filed 12/11/86.]

WAC 246-250-370 Alternative requirements for waste classification and characteristics. The department may, upon request or on its own initiative, authorize other provisions for the classification and characteristics of waste on a specific basis, if, after evaluation of the specific characteristics of the waste, disposal site, and method of disposal, it finds reasonable assurance of compliance with the performance objectives specified in this chapter.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–370, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–280, filed 12/11/86.]

FINANCIAL ASSURANCES

WAC 246-250-500 Applicant qualifications and assurances. Each applicant shall show that it either possesses the necessary funds or has reasonable assurance of obtaining the necessary funds, or by a combination of the two, to cover the estimated costs of conducting all

licensed activities over the planned operating life of the project, including costs of construction and disposal.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-250-500, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-61-290, filed 12/11/86.]

WAC 246-250-520 Funding for disposal site closure and stabilization. (1) The applicant shall provide assurances prior to the commencement of operations that sufficient funds will be available to carry out disposal site closure and stabilization, including: (a) Decontamination or dismantlement of land disposal facility structures; and (b) closure and stabilization of the disposal site so that following transfer of the disposal site to the site owner, the need for ongoing active maintenance is eliminated to the extent practicable and only minor custodial care, surveillance and monitoring are required. These assurances shall be based on department-approved cost estimates reflecting the department-approved plan for disposal site closure and stabilization. The applicant's cost estimates must take into account total costs that would be incurred if an independent contractor were hired to perform the closure and stabilization work.

(2) In order to avoid unnecessary duplication and expense, the department will accept financial sureties that have been consolidated with earmarked financial or surety arrangements established to meet requirements of federal or other state agencies for such decontamination, closure, and stabilization. The department will accept these arrangements only if they are considered adequate to satisfy the requirements of this section and that the portion of the surety which covers the closure of the disposal site is clearly identified and committed for use in accomplishing these activities.

(3) The licensee's financial or surety arrangement shall be submitted annually for review by the department to assure that sufficient funds will be available for completion of the closure plan.

(4) The amount of the licensee's financial or surety arrangement shall change in accordance with changes in the predicted costs of closure and stabilization. Factors affecting closure and stabilization cost estimates include inflation, increases in the amount of disturbed land, changes in engineering plans, closure and stabilization that has already been accomplished, and any other conditions affecting costs. The financial or surety arrangement shall be sufficient at all times to cover the costs of closure and stabilization of the disposal units that are expected to be used before the next license renewal.

(5) The financial or surety arrangement shall be written for a specified period of time and shall be automatically renewed unless the person who issues the surety notifies the department, the beneficiary (the site owner), and the principal (the licensee) not less than ninety days prior to the renewal date of its intention not to renew. In such a situation, the licensee must submit a replacement surety within thirty days after notification of cancellation. If the licensee fails to provide a replacement surety acceptable to the department, the beneficiary may collect on the original surety.

(6) Proof of forfeiture shall not be necessary to collect the surety so that, in the event that the licensee could not provide an acceptable replacement surety within the required time, the surety shall be automatically collected prior to its expiration. The conditions described above shall be clearly stated on any surety instrument.

(7) Financial or surety arrangements generally acceptable to the department include surety bonds, cash deposits, certificates of deposit, deposits of government securities, escrow accounts, irrevocable letters or lines of credit, trust funds, and combinations of the above or such other types of arrangements as may be approved by the department. Self-insurance, or any arrangement which essentially constitutes self-insurance, will not satisfy the surety requirement for private sector applicants.

(8) The licensee's financial or surety arrangement shall remain in effect until the closure and stabilization program has been completed and approved by the department, and the license has been transferred to the site owner.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–520, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–300, filed 12/11/86.]

WAC 246-250-530 Financial assurances for institutional controls. (1) Prior to the issuance of the license, the applicant shall provide for departmental approval, a binding arrangement, between the applicant and the disposal site owner that ensures that sufficient funds will be available to cover the costs of monitoring and any required maintenance during the institutional control period. The binding arrangement shall be reviewed annually by the department to ensure that changes in inflation, technology, and disposal facility operations are reflected in the arrangements.

(2) Subsequent changes to the binding arrangement specified in subsection (1) of this section relevant to institutional control shall be submitted to the department for prior approval.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–530, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–310, filed 12/11/86.]

RECORDS, REPORTS, TESTS, AND INSPECTIONS

WAC 246-250-600 Maintenance of records, reports, and transfers. (1) Each licensee shall maintain any records and make any reports in connection with the licensed activities as may be required by the conditions of the license or by the rules, regulations, and orders of the department.

(2) Records which are required by these regulations or by license conditions shall be maintained for a period specified by the appropriate regulations or by license condition. If a retention period is not otherwise specified, these records must be maintained and transferred to the officials specified in subsection (4) of this section as a condition of license termination unless the department otherwise authorizes their disposition.

- (3) Records which shall be maintained pursuant to this chapter may be the original or a reproduced copy or microfilm if this reproduced copy or microfilm is capable of producing copy that is clear and legible at the end of the required retention period.
- (4) Notwithstanding subsections (1) through (3) of this section, copies of records of the location and the quantity of wastes contained in the disposal site must be transferred upon license termination to the chief executive of the nearest municipality, the chief executive of the county in which the facility is located, the county zoning board or land development and planning agency, the state governor, the United States Department of Energy, and other state, local, and federal governmental agencies as designated by the department at the time of license termination.
- (5) Following receipt and acceptance of a shipment of waste, the licensee shall record the date of disposal of the waste, the location of the disposal site, the condition of the waste packages as received, any discrepancies between materials listed on the manifest and those received, and any evidence of leaking or damaged packages or radiation or contamination levels in excess of limits specified in United States Department of Transportation and state of Washington regulations. The licensee shall briefly describe any repackaging operations of any of the waste packages included in the shipment, plus any other information required by the department as a license condition.
- (6) Each licensee authorized to dispose of waste received from other persons shall file a copy of its financial report or a certified financial statement annually with the department in order to update the information base for determining financial qualifications.
- (7)(a) Each licensee authorized to dispose of waste received from other persons, pursuant to this chapter, shall submit annual reports to the department. Reports shall be submitted by the end of the first calendar quarter of each year for the preceding year.
 - (b) The reports shall include:
- (i) Specification of the quantity of each of the principal contaminants released to unrestricted areas in liquid and in airborne effluents during the preceding year;
- (ii) The results of the environmental monitoring program;
- (iii) A summary of licensee disposal unit survey and maintenance activities;
- (iv) A summary, by waste class, of activities and quantities of radionuclides disposed of;
- (v) Any instances in which observed site characteristics were significantly different from those described in the application for a license; and
- (vi) Any other information the department may require.
- (c) If the quantities of waste released during the reporting period, monitoring results, or maintenance performed are significantly different from those predicted, the report must cover this specifically.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–600, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–320, filed 12/11/86.]

WAC 246-250-620 Tests on land disposal facilities. Each licensee shall perform, or permit the department to perform, any tests the department deems appropriate or necessary for the administration of the regulations in this chapter, including but not limited to, tests of:

- (1) Wastes;
- (2) Facilities used for the receipt, storage, treatment, handling, or disposal of wastes;
- (3) Radiation detection and monitoring instruments; or
- (4) Other equipment and devices used in connection with the receipt, possession, handling, treatment, storage, or disposal of waste.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-250-620, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-61-330, filed 12/11/86.]

LAND DISPOSAL OF RADIOACTIVE WASTE

WAC 246-250-700 Agency inspections of land disposal facilities. (1) Each licensee shall afford to the department at all reasonable times opportunity to inspect waste not yet disposed of, and the premises, equipment, operations, and facilities in which wastes are received, possessed, handled, treated, stored, or disposed.

(2) Each licensee shall make available to the department for inspection, upon reasonable notice, records kept by it pursuant to these regulations. Authorized representatives of the department may copy and take away copies of, for the department's use, any record required to be kept pursuant to these regulations.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–250–700, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–61–340, filed 12/11/86.]

Chapter 246–252 WAC RADIATION PROTECTION—URANIUM AND/OR THORIUM MILLING

WAC 246-252-001

1 Reclamation and decommissioning.

246-252-010 Definitions.

246-252-020 Purpose of uranium mill tailings areas.

246-252-030 Criteria related to disposition of uranium mill tailings or wastes.

246-252-040 Continuing dose assessment.

246-252-050 Appendix A.

WAC 246-252-001 Reclamation and decommissioning. A specific plan for reclamation and disposal of tailings and for decommissioning the site of uranium or

thorium milling operations shall be included as part of the proposed action assessed under SEPA regulations and guidelines as required by WAC 402-22-070 (6)(a) for licensing of environmentally significant operations. For any uranium or thorium mill in operation on or before the effective date of this regulation for which a plan for reclamation and disposal of tailings and decommissioning of the site has not been submitted and assessed, such a plan must be submitted to the department and a final environmental impact statement or final declaration of nonsignificance must accompany or precede the license renewal.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-252-001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 79-12-073 (Order 1459), § 402-52-005, filed 11/30/79, effective 1/1/80.]

WAC 246-252-010 Definitions. The following definitions apply to the specified terms as used in this chapter.

- (1) "Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells or springs.
- (2) "Closure" means the activities following operations to decontaminate and decommission the buildings and site used to produce by-product materials and reclaim the tailings and/or waste disposal area.
- (3) "Closure plan" means the department approved plan to accomplish closure.
- (4) "Compliance period" begins when the department sets secondary groundwater protection standards and ends when the owner or operator's license is terminated and the site is transferred to the state or federal agency for long-term care.
- (5) "Dike" means an embankment or ridge of either natural or man-made materials used to prevent the movement of liquids, sludges, solids, or other materials.
- (6) "Disposal area" means the area containing byproduct materials to which the requirements of criterion 6 apply.
- (7) "Existing portion" means that land surface area of an existing surface impoundment on which significant quantities of uranium or thorium by-product materials had been placed prior to September 30, 1983.
- (8) "Groundwater" means water below the land surface in a zone of saturation.
- (9) "Leachate" means any liquid, including any suspended or dissolved components in the liquid, that has percolated through or drained from the by-product material.
- (10) "Licensed site" means the area contained within the boundary of a location under the control of persons generating or storing by—product materials under a department license.
- (11) "Liner" means a continuous layer of natural or man-made materials, beneath or on the sides of a surface impoundment which restricts the downward or lateral escape of by-product material, hazardous constituents, or leachate.
- (12) "Point of compliance" is the site specific location in the uppermost aquifer where the groundwater protection standard must be met.
- (13) "Surface impoundment" means a natural topographic depression, man-made excavation, or diked area, which is designed to hold an accumulation of liquid

wastes or wastes containing free liquids, and which is not an injection well.

(14) "Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–252–010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–52–050, filed 12/11/86.]

WAC 246-252-020 Purpose of uranium mill tailings areas. Uranium mill tailing areas shall be used only for disposal of radioactive wastes originating from the exploration, mining, and milling of uranium.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-252-020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080 and chapter 70.121 RCW. 86-17-027 (Order 2406), § 402-52-090, filed 8/13/86.]

WAC 246-252-030 Criteria related to disposition of uranium mill tailings or wastes. As used in this section, the term "as low as reasonably achievable" has the same meaning as in WAC 402-10-010. The term by-product material has the same meaning as WAC 402-12-050 (6)(b).

As required by WAC 402-22-150(6), each applicant for a license to possess and use source material in conjunction with uranium or thorium milling, or by-product material at sites formerly associated with such milling, is required to include in a license application proposed specifications relating to the milling operation and the disposition of tailings or waste resulting from such milling activities. This section establishes criteria relating to the siting, operation, decontamination, decommissioning, and reclamation of mills and tailings or waste systems and sites at which such mills and systems are located and site and by-product material ownership. Applications must clearly demonstrate how these criteria have been addressed. The specifications shall be developed considering the expected full capacity of tailings or waste systems and the lifetime of mill operations. Where later expansions of systems or operations may be likely, the amenability of the disposal system to accommodate increased capacities without degradation in long-term stability and other performance factors shall be evaluated.

Licensees or applicants may propose alternatives to the specific requirements in these criteria. The alternative proposals may take into account local or regional conditions, including geology, topography, hydrology, and meteorology. The department may find that the proposed alternatives meet the department's requirements if the alternatives will achieve a level of stabilization and containment of the sites concerned, and a level of protection for public health, safety, and the environment from radiological and nonradiological hazards associated with the sites, which is equivalent to, to the extent practicable, or more stringent than the level which would be achieved by the requirements of the

standards promulgated by the United States Environmental Protection Agency in 40 CFR 192, Subparts D and E.

- (1) Criterion 1 In selecting among alternative tailings disposal sites or judging the adequacy of existing tailings sites, the following site features which would assure meeting the broad objective of isolating the tailings and associated contaminants from man and the environment for one thousand years to the extent reasonably achievable, and in any case, for at least two hundred years without ongoing active maintenance shall be considered:
 - (a) Remoteness from populated areas;
- (b) Hydrogeologic and other environmental conditions conducive to continued immobilization and isolation of contaminants from groundwater sources; and
- (c) Potential for minimizing erosion, disturbance, and dispersion by natural forces over the long term.

In the selection of disposal sites, primary emphasis shall be given to isolation of tailings or wastes, a matter having long-term impacts, as opposed to consideration only of short-term convenience or benefits, such as minimization of transportation or land acquisition costs. While isolation of tailings will be a function of both site characteristics and engineering design, overriding consideration shall be given to siting features given the long-term nature of the tailings hazards.

Tailings shall be disposed in a manner such that no active maintenance is required to preserve the condition of the site.

- (2) Criterion 2 To avoid proliferation of small waste disposal sites, by-product material from in-situ extraction operations, such as residues from solution evaporation or contaminated control processes, and wastes from small remote above ground extraction operations shall preferably be disposed at existing large mill tailings disposal sites; unless, considering the nature of the wastes, such as their volume and specific activity and the costs and environmental impacts of transporting the wastes to a large disposal site, such offsite disposal is demonstrated to be impracticable or the advantage of onsite burial clearly outweigh the benefits of reducing the perpetual surveillance obligations.
- (3) Criterion 3 The "prime option" for disposal of tailings is placement below grade, either in mines or specially excavated pits (that is, when the need for any specially constructed retention structure is eliminated).

The evaluation of alternative sites and disposal methods performed by mill operators in support of their proposed tailings disposal program (provided in applicants' environmental reports) shall reflect serious consideration of this disposal mode. In some instances, below—grade disposal may not be the most environmentally sound approach, such as might be the case if a groundwater formation is relatively close to the surface or not very well isolated by overlying soils and rock. Also, geologic and topographic conditions might make full, below—grade burial impracticable; for example, near—surface bedrock could create prominent excavation costs while more

suitable alternate sites may be available. Where full below-grade burial is not practicable, the size of the retention structures, and the size and steepness of slopes of associated exposed embankments, shall be minimized by excavation to the maximum extent reasonably achievable or appropriate, given the geologic and hydrogeologic conditions at a site. In these cases, it must be demonstrated that an above-grade disposal program will provide reasonably equivalent isolation of the tailings from natural erosional forces.

- (4) Criterion 4 The following site and design criteria shall be adhered to whether tailings or wastes are disposed of above or below grade:
- (a) Upstream rainfall catchment areas must be minimized to decrease erosion potential and the size of the probable maximum flood which could erode or wash out sections of the tailings disposal area.
- (b) Topographic features shall provide good wind protection.
- (c) Embankment and cover slopes shall be relatively flat after final stabilization to minimize erosion potential and to provide conservative factors of safety assuring long-term stability. The broad objective should be to contour final slopes to grades which are as close as possible to those which would be provided if tailings were disposed of below grade; this could, for example, lead to slopes of about ten horizontal to one vertical (10h:1v) or less steep. In general, slopes should not be steeper than about 5h:1v. Where steeper slopes are proposed, reasons why a slope less steep than 5h:1v would be impracticable should be provided, and compensating factors and conditions which make such slopes acceptable should be identified.
- (d) A fully self-sustaining vegetative cover shall be established or rock cover employed to reduce wind and water erosion to negligible levels.

Where a full vegetative cover is not likely to be selfsustaining due to climatic conditions, such as in semiarid and arid regions, rock cover shall be employed on slopes of the impoundment system.

The following factors shall be considered in establishing the final rock cover design to avoid displacement of rock particles by human and animal traffic or by natural processes, and to preclude undercutting and piping:

- (i) Shape, size, composition, gradation of rock particles (excepting bedding material, average particle size shall be at least cobble size or greater);
- (ii) Rock cover thickness and zoning of particles by size; and
 - (iii) Steepness of underlying slopes.
- (e) Individual rock fragments shall be dense, sound, and resistant to abrasion, and free from defects that would tend to unduly increase their destruction by water and frost actions. Weak, friable, or laminated aggregate shall not be used. Shale, rock laminated with shale, and cherts shall not be used.

Rock covering of slopes may not be required where top covers are on the order of ten meters or greater; impoundment slopes are on the order of 10h:1v or less; bulk cover materials have inherently favorable erosion resistance characteristics; and there is negligible drainage catchment area upstream of the pile, and there is good wind protection as described in (a) and (b) of this subsection.

- (f) Impoundment surfaces shall be contoured to avoid areas of concentrated surface runoff or abrupt or sharp changes in slope gradient. In addition to rock cover on slopes, areas toward which surface runoff might be directed shall be well protected with substantial rock cover (riprap). In addition to providing for stability of the impoundment systems itself, the overall stability, erosion potential, and geomorphology of surrounding terrain shall be evaluated to assure that there are no processes, such as gully erosion, which would lead to impoundment instability.
- (g) The impoundment shall not be located near a capable fault that could cause a maximum credible earthquake larger than that which the impoundment could reasonably be expected to withstand. As used in this criterion, the term "capable fault" has the same meaning as defined in Section III (g) of Appendix A of 10 CFR Part 100. The term "maximum credible earthquake" means that earthquake which would cause the maximum vibratory ground motion based upon an evaluation of earthquake potential considering the regional and local geology and seismology and specific characteristics of local subsurface material.
- (h) The impoundment, where feasible, should be designed to incorporate features which will promote deposition of suspended particles. For example, design features which promote deposition of sediment suspended in any runoff which flows into the impoundment area might be utilized; the object of such a design feature would be to enhance the thickness of cover over time.
- (5) Criterion 5 criteria 5(a) through 5(g) and new criterion 9 incorporate the basic groundwater protection standards imposed by the United States Environmental Protection Agency in 40 CFR Part 192, Subparts D and E (48 FR 45926; October 7, 1983) which apply during operations and prior to the end of closure. Groundwater monitoring to comply with these standards is required by this criterion.
- (a) The primary groundwater protection standard is a design standard for surface impoundments used to manage uranium and thorium by-product material. Surface impoundments (except for an existing portion) must have a liner that is designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent subsurface soil, groundwater, or surface water at any time during the active life (including the closure period) of the impoundment. The liner may be constructed of materials that may allow wastes to migrate into the liner (but not into the adjacent subsurface soil, groundwater, or surface water) during the active life of the facility, provided that impoundment closure includes removal or decontamination of all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate. For impoundments that will be closed with the liner material

- left in place, the liner must be constructed of materials that can prevent wastes from migrating into the liner during the active life of the facility.
- (b) The liner required by (a) of this subsection must be:
- (i) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;
- (ii) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and
- (iii) Installed to cover all surrounding earth likely to be in contact with the wastes or leachate.
- (c) The applicant or licensee will be exempted from the requirements of (a) of this subsection if the department finds, based on a demonstration by the applicant or licensee, that alternate design and operating practices together with site characteristics will prevent the migration of any hazardous constituents into groundwater or surface water at any future time. In deciding whether to grant an exemption, the department will consider:
 - (i) The nature and quantity of the wastes;
 - (ii) The proposed alternate design and operation;
- (iii) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the impoundment and groundwater or surface water; and
- (iv) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to groundwater or surface water.
- (d) A surface impoundment must be designed, constructed, maintained, and operated to prevent overtopping resulting from normal or abnormal operations; overfilling; wind and wave actions; rainfall; runon; malfunctions of level controllers, alarms, and other equipment; and human error.
- (e) When dikes are used to form the surface impoundment, the dikes must be designed, constructed, and maintained with sufficient structural integrity to prevent massive failure of the dikes. In ensuring structural integrity, it must not be presumed that the liner system will function without leakage during the active life of the impoundment.
- (f) Uranium and thorium by-product materials must be managed to conform to the following secondary groundwater protection standard: Hazardous constituents entering the groundwater from a licensed site must not exceed the specified concentration limits in the uppermost aquifer beyond the point of compliance during the compliance period. Hazardous constituents are those constituents identified by the department pursuant to (g) of this subsection. Specified concentration limits are those limits established by the department as indicated in (j) of this subsection. The department will also establish the point of compliance and compliance period on a site specific basis through license conditions and orders.

The objective in selecting the point of compliance is to provide the earliest practicable warning that the impoundment is releasing hazardous constituents to the groundwater. The point of compliance must be selected to provide prompt indication of groundwater contamination on the hydraulically downgradient edge of the disposal area. The department must identify hazardous constituents, establish concentration limits, set the compliance period, and adjust the point of compliance, if needed, when the detection monitoring established under criterion 7 indicates leakage of hazardous constituents from the disposal area.

- (g) A constituent becomes a hazardous constituent subject to (j) of this subsection when the constituent:
- (i) Is reasonably expected to be in or derived from the by-product material in the disposal area;
- (ii) Has been detected in the groundwater in the uppermost aquifer; and
 - (iii) Is listed in WAC 402-52-300 Appendix A.
- (h) The department may exclude a detected constituent from the set of hazardous constituents on a site specific basis if it finds that the constituent is not capable of posing a substantial present or potential hazard to human health or the environment. In deciding whether to exclude constituents, the department will consider the following:
- (i) Potential adverse effect on groundwater quality, considering —
- (A) The physical and chemical characteristics of the waste in the licensed site, including its potential for migration;
- (B) The hydrogeological characteristics of the facility and surrounding land;
- (C) The quantity of groundwater and the direction of groundwater flow;
- (D) The proximity and withdrawal rates of ground-water users;
- (E) The current and future uses of groundwater in the area;
- (F) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality;
- (G) The potential for health risks caused by human exposure to waste constituents;
- (H) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;
- (I) The persistence and permanence of the potential adverse effects.
- (ii) Potential adverse effects on hydraulically-connected surface water quality, considering —
- (A) The volume and physical and chemical characteristics of the waste in the licensed site;
- (B) The hydrogeological characteristics of the facility and surrounding land;
- (C) The quantity and quality of groundwater, and the direction of groundwater flow;
 - (D) The patterns of rainfall in the region;
- (E) The proximity of the licensed site to surface waters:

- (F) The current and future uses of surface waters in the area and any water quality standards established for those surface waters;
- (G) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality;
- (H) The potential for health risks caused by human exposure to waste constituents;
- (I) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and
- (J) The persistence and permanence of the potential adverse effects.
- (i) In making any determinations under (h) and (k) of this subsection about the use of groundwater in the area around the facility, the department will consider any identification of underground sources of drinking water and exempted aquifers made by the United States Environmental Protection Agency.
- (j) At the point of compliance, the concentration of a hazardous constituent must not exceed —
- (i) The department approved background concentration of that constituent in the groundwater;
- (ii) The respective value given in the table in subsection (5)(1) of this section if the constituent is listed in the table and if the background level of the constituent is below the value listed; or
- (iii) An alternate concentration limit established by the department.
- (k) The department will establish a site specific alternate concentration limit for a hazardous constituent as provided in (j) of this subsection if it finds that the constituent will not pose a substantial present or potential hazard to human health or the environment as long as the alternate concentration limit is not exceeded. In establishing alternate concentration limits, the department will apply its as low as reasonably achievable criterion in this chapter. The department will also consider the following factors:
- (i) Potential adverse effects on groundwater quality, considering —
- (A) The physical and chemical characteristics of the waste in the licensed site including its potential for migration;
- (B) The hydrogeological characteristics of the facility and surrounding land;
- (C) The quantity of groundwater and the direction of groundwater flow;
- (D) The proximity and withdrawal rates of ground-water users;
- (E) The current and future uses of groundwater in the area;
- (F) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality;
- (G) The potential for health risks caused by human exposure to waste constituents;
- (H) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;

- (I) The persistence and permanence of the potential adverse effects.
- (ii) Potential adverse effects on hydraulically-connected surface water quality, considering —
- (A) The volume and physical and chemical characteristics of the waste in the licensed site;
- (B) The hydrogeological characteristics of the facility and surrounding land;
- (C) The quantity and quality of groundwater, and the direction of groundwater flow;
 - (D) The patterns of rainfall in the region;
- (E) The proximity of the licensed site to surface waters;
- (F) The current and future uses of surface waters in the area and any water quality standards established for those surface waters;
- (G) The existing quality of surface water including other sources of contamination and the cumulative impact on surface water quality;
- (H) The potential for health risks caused by human exposure to waste constituents;
- (I) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and
- (J) The persistence and permanence of the potential adverse effects.
- (1) MAXIMUM VALUES FOR GROUNDWATER PROTECTION:

Constituent or Property	Maximum Concentration
	Milligrams per liter
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium	0.05
Lead	0.05
Mercury	0.002
Selenium	0.01
Silver	0.05
Endrin (1,2,3,4,10,10-hexachloro-1,7 -expoxy-	
1,4,4a,5,6,7,8,9a-octahydro-1, 4-endo, endo-	
5,8-dimethano naphthalene)	0.0002
Lindane (1,2,3,4,5,6-hexachlorocyclohexane,	
gamma isomer)	0.004
Methoxychlor (1,1,1-Trichloro-2,2-bis	
(p-methoxyphenylethane)	0.1
Toxaphene (C ₁₀ H ₁₀ Cl ₆ , Technical chlorinated	
camphene, 67-69 percent chlorine)	0.005
2,4-D (2,4-Dichlorophenoxyacetic acid)	0.1
2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropion	ic
acid)	0.01
,	Picocuries per liter
Combined radium - 226 and radium - 228	
Gross alpha - particle activity (excluding	
radon and uranium when producing uranium	
by-product material or thorium when producing	
thorium by-product material)	

(m) If the groundwater protection standards established under (f) of this subsection are exceeded at a licensed site, a corrective action program must be put into operation as soon as is practicable, and in no event later than eighteen months after the department finds that the standards have been exceeded. The licensee shall submit the proposed corrective action program and supporting

- rationale for department approval prior to putting the program into operation, unless otherwise directed by the department. The objective of the program is to return hazardous constituent concentration levels in groundwater to the concentration limits set as standards. The licensee's proposed program must address removing the hazardous constituents that have entered the groundwater at the point of compliance or treating them in place. The program must also address removing or treating in place any hazardous constituents that exceed concentration limits in groundwater between the point of compliance and the downgradient facility property boundary. The licensee shall continue corrective action measures to the extent necessary to achieve and maintain compliance with the groundwater protection standard. The department will determine when the licensee may terminate corrective action measures based on data from the groundwater monitoring program and other information that provide reasonable assurance that the groundwater protection standard will not be exceeded.
- (n) In developing and conducting groundwater protection programs, applicants and licensees shall also consider the following:
- (i) Installation of bottom liners (where synthetic liners are used, a leakage detection system must be installed immediately below the liner to ensure major failures are detected if they occur. This is in addition to the groundwater monitoring program conducted as provided in this criterion. Where clay liners are proposed or relatively thin, in-situ clay soils are to be relied upon for seepage control, tests must be conducted with representative tailings solutions and clay materials to confirm that no significant deterioration of permeability or stability properties will occur with continuous exposure of clay to tailings solutions. Tests must be run for a sufficient period of time to reveal any effects if they are going to occur (in some cases deterioration has been observed to occur rather rapidly after about nine months of exposure)).
- (ii) Mill process designs which provide the maximum practicable recycle of solutions and conservation of water to reduce the net input of liquid to the tailings impoundment.
- (iii) Dewatering of tailings by process devices and/or in-situ drainage systems (at new sites, tailings must be dewatered by a drainage system installed at the bottom of the impoundment to lower the phreatic surface and reduce the driving head of seepage, unless tests show tailings are not amenable to such a system. Where insitu dewatering is to be conducted, the impoundment bottom must be graded to assure that the drains are at a low point. The drains must be protected by suitable filter materials to assure that drains remain free running. The drainage system must also be adequately sized to assure good drainage).
- (iv) Neutralization to promote immobilization of hazardous constituents.
- (o) Where groundwater impacts are occurring at an existing site due to seepage, action must be taken to alleviate conditions that lead to excessive seepage impacts and restore groundwater quality. The specific seepage

control and groundwater protection method, or combination of methods, to be used must be worked out on a site-specific basis. Technical specifications must be prepared to control installation of seepage control systems. A quality assurance, testing, and inspection program, which includes supervision by a qualified engineer or scientist, must be established to assure the specifications are met.

- (p) In support of a tailings disposal system proposal, the applicant/operator shall supply information concerning the following:
- (i) The chemical and radioactive characteristics of the waste solutions.
- (ii) The characteristics of the underlying soil and geologic formations particularly as they will control transport of contaminants and solutions. This includes detailed information concerning extent, thickness, uniformity, shape, and orientation of underlying strata. Hydraulic gradients and conductivities of the various formations must be determined. This information must be gathered from borings and field survey methods taken within the proposed impoundment area and in surrounding areas where contaminants might migrate to groundwater. The information gathered on boreholes must include both geologic and geophysical logs in sufficient number and degree of sophistication to allow determining significant discontinuities, fractures, and channeled deposits of high hydraulic conductivity. If field survey methods are used, they should be in addition to and calibrated with borehole logging. Hydrologic parameters such as permeability may not be determined on the basis of laboratory analysis of samples alone; a sufficient amount of field testing (e.g., pump tests) must be conducted to assure actual field properties are adequately understood. Testing must be conducted to allow estimating chemi-sorption attenuation properties of underlying soil and rock.
- (iii) Location, extent, quality, capacity and current uses of any groundwater at and near the site.
- (q) Steps must be taken during stockpiling of ore to minimize penetration of radionuclides into underlying soils; suitable methods include lining and/or compaction of ore storage areas.
- (6) Criterion 6 (a) In cases where waste by-product material is to be permanently disposed, an earthen cover shall be placed over tailings or wastes at the end of the milling operations and the waste disposal area shall be closed in accordance with a design¹ which shall provide reasonable assurance of control of radiological hazard to:
- (i) Be effective for one thousand years, to the extent reasonably achievable, and, in any case, for at least two hundred years; and
- (ii) Limit releases of Radon-222 from uranium by-product materials, and Radon-220 from thorium by-product materials, to the atmosphere so as to not exceed an average² release rate of twenty picocuries per square meter per second (pCi/m²/s). In computing required tailings cover thicknesses, moisture in soils in excess of

amounts found normally in similar soils in similar circumstances shall not be considered. Direct gamma exposure from the tailings or wastes should be reduced to background levels. The effects of any thin synthetic layer shall not be taken into account in determining the calculated radon exhalation level. If nonsoil materials are proposed as cover materials, it must be demonstrated that such materials will not crack or degrade by differential settlement, weathering, or other mechanism over long term time intervals.

- (b) Near surface materials (i.e., within the top three meters) shall not include mine waste or rock that contains elevated levels of radium; soils used for near surface cover must be essentially the same, as far as radioactivity is concerned, as that of surrounding soils.
- (c) The design requirements in this criterion for longevity and control of radon releases shall apply to any portion of a licensed and/or disposal site unless such portion contains a concentration of radium in land, averaged over areas of one hundred square meters, which, as a result of by—product material does not exceed the background level by more than:
- (i) Five picocuries per gram (pCi/g) of Radium-226, or, in the case of thorium by-product material, Radium-228, averaged over the first fifteen centimeters below the surface; and
- (ii) Fifteen pCi/g of Radium-226, or, in the case of thorium by-product material, Radium-228, averaged over fifteen centimeters thick layers more than fifteen centimeters below the surface.
- (d) The licensee must also address the nonradiological hazards associated with the wastes in planning and implementing closure. The licensee shall ensure that disposal areas are closed in a manner that minimizes the need for further maintenance. To the extent necessary to prevent threats to human health and the environment, the license shall control, minimize, or eliminate post-closure escape of nonradiological hazardous constituents, leachate, contaminated rainwater, or waste decomposition products to the ground or surface waters or to the atmosphere.

Footnotes:

- The standard applies to design. Monitoring for radon after installation of an appropriately designed cover is not required.
- This average shall apply to the entire surface of each disposal area over periods of at least one year, but short compared to one hundred years. Radon will come from both uranium by-product materials and from covering material. Radon envisions from covering materials should be estimated as part of developing a closure plan for each site. The standard, however, applies only to emissions from by-product materials to the atmosphere.
- (7) Criterion 7 Milling operations shall be conducted so that all airborne effluent releases are reduced to as low as is reasonably achievable. The primary means of accomplishing this shall be by means of emission controls. Institutional controls, such as extending the site boundary and exclusion area, may be employed to ensure that offsite exposure limits are met, but only after all practicable measures have been taken to control emissions at the source. Notwithstanding the existence of individual dose standards, strict control of emissions is

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necessary to assure that population exposures are reduced to the maximum extent reasonably achievable and to avoid site contamination. The greatest potential sources of offsite radiation exposure (aside from radon exposure) are dusting from dry surfaces of the tailings disposal area not covered by tailings solution and emissions from yellowcake drying and packaging operations. During operations and prior to closure, radiation doses from radon emissions from surface impoundments shall be kept as low as is practicable. Checks shall be made and logged hourly of all parameters (e.g., differential pressure and scrubber water flow rate) which determine the efficiency of yellowcake stack emission control equipment operation. It shall be determined whether or not conditions are within a range prescribed to ensure that the equipment is operating consistently near peak efficiency; corrective action shall be taken when performance is outside of prescribed ranges. Effluent control devices shall be operative at all times during drying and packaging operations and whenever air is exhausting from the yellowcake stack.

Drying and packaging operations shall terminate when controls are inoperative. When checks indicate the equipment is not operating within the range prescribed for peak efficiency, actions shall be taken to restore parameters to the prescribed range. When this cannot be done without shutdown and repairs, drying and packaging operations shall cease as soon as practicable.

Operations may not be restarted after cessation due to off-normal performance until needed corrective actions have been identified and implemented. All such cessations, corrective actions, and restarts shall be reported to the agency in writing, within ten days of the subsequent restart.

To control dusting from tailings, that portion not covered by standing liquids shall be wetted or chemically stabilized to prevent or minimize blowing and dusting to the maximum extent reasonably achievable. This requirement may be relaxed if tailings are effectively sheltered from wind, such as may be the case where they are disposed of below grade and the tailings surface is not exposed to wind. Consideration shall be given in planning tailings disposal programs to methods which would allow phased covering and reclamation of tailings impoundments since this will help in controlling particulate and radon emissions during operation. To control dustings from diffuse sources, such as tailings and ore pads where automatic controls do not apply, operators shall develop written operating procedures specifying the methods of control which will be utilized.

Milling operations producing or involving thorium by-product material shall be conducted in such a manner as to provide reasonable assurance that the annual dose equivalent does not exceed twenty-five millirems to the whole body, seventy-five millirems to the thyroid, and twenty-five millirems to any other organ of any member of the public as a result of exposures to the planned discharge of radioactive materials, Radon-220 and its daughters excepted, to the general environment.

Uranium and thorium by-product materials shall be managed so as to conform to the applicable provisions of Title 40 of the Code of Federal Regulations, Part 440, Ore Mining and Dressing Point Source Category: Effluent Limitations Guidelines and New Source Performance Standards, Subpart C, Uranium, Radium, and Vanadium Ores Subcategory, as codified on January 1, 1983.

The licensee shall establish a detection monitoring program needed to establish the groundwater protection standards in subsection (5)(f) of this section. A detection monitoring program has two purposes. The initial purpose of the program is to detect leakage of hazardous constituents from the disposal area so that the need to set groundwater protection standards is monitored. If leakage is detected, the second purpose of the program is to generate data and information needed for the department to establish the standards under subsection (5)(f) of this section. The data and information must provide a sufficient basis to identify those hazardous constituents which require concentration limit standards and to enable the department to set the limits for those constituents and the compliance period. They may also need to provide the basis for adjustments to the point of compliance. For licenses in effect September 30, 1983, the detection monitoring programs must have been in place by October 1, 1984. For licenses issued after September 30, 1983, the detection monitoring programs must be in place when specified by the department in orders or license conditions. Once groundwater protection standards have been established pursuant to subsection (5)(f) of this section, the licensee shall establish and implement a compliance monitoring program. The purpose of the compliance monitoring program is to determine that the hazardous constituent concentrations in groundwater continue to comply with the standards set by the department. In conjunction with a corrective action program, the licensee shall establish and implement a corrective action monitoring program. The purpose of the corrective action monitoring program is to demonstrate the effectiveness of the corrective actions. Any monitoring program required by this paragraph may be based on existing monitoring programs to the extent the existing programs can meet the stated objective for the program.

(8) Criterion 8 – These criteria relating to ownership of tailings and their disposal sites become effective on November 8, 1981, and apply to all licenses terminated, issued, or renewed after that date.

Any uranium or thorium milling license or tailings license shall contain such terms and conditions as the United States Nuclear Regulatory Commission determines necessary to assure that prior to termination of the license, the licensee will comply with ownership requirements of this criterion for sites used for tailings disposal.

Title to the by-product material licensed pursuant to WAC 402-22-150 and land, including any interests therein (other than land owned by the United States or by a state) which is used for the disposal of any such by-product material, or is essential to ensure the long term stability of such disposal site, shall be transferred to the United States or the state. In view of the fact that physical isolation must be the primary means of long

term control, and government land ownership is a desirable supplementary measure, ownership of certain severable subsurface interests (for example, mineral rights) may be determined to be unnecessary to protect the public health and safety and the environment. In any case, however, the applicant/operator must demonstrate a serious effort to obtain such subsurface rights, and must, in the event that certain rights cannot be obtained, provide notification in local public land records of the fact that the land is being used for the disposal of radioactive material and is subject to either a United States Nuclear Regulatory Commission general or specific license prohibiting the disruption and disturbance of the tailings. In some rare cases, such as may occur with deep burial where no ongoing site surveillance will be required, surface land ownership transfer requirements may be waived. For licenses issued before November 8, 1981, the United States Nuclear Regulatory Commission may take into account the status of the ownership of such land, and interests therein, and the ability of a licensee to transfer title and custody thereof to the United States or the state.

(9) Criterion 9 – Secondary groundwater protection standards required by subsection (5) of this section are concentration limits for individual hazardous constituents. The list of constituents found in Appendix A identifies the constituents for which standards must be set and complied with if the specific constituent is reasonably expected to be in or derived from the by-product material and has been detected in groundwater. For purposes of this criterion, the property of gross alpha activity will be treated as if it is a hazardous constituent. Thus, when setting standards under subsection (5)(j) of this section, the department will also set a limit for gross alpha activity.

[Statutory Authority: RCW 43.70.040, 91-02-049 (Order 121), recodified as § 246-252-030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-52-100, filed 12/11/86. Statutory Authority: Chapter 70.121 RCW. 81-16-031 (Order 1683), § 402-52-100, filed 7/28/81.]

WAC 246-252-040 Continuing dose assessment.

Each uranium or thorium milling operation shall submit in writing to the department by May 1 and November 1 of each year, reports specifying the quantities of each of the principle radionuclides released to unrestricted areas in liquid and in gaseous effluent during the previous six months of operations. This data shall be reported in a manner that will permit the department to confirm the potential annual radiation doses to the public. All data from the radiological and nonradiological environmental monitoring program will also be submitted for the same time period and frequency as specified above. The data shall be reported in a manner which will allow the department to confirm the potential annual radiation doses to the public. In addition, the report due each May 1 shall include a dose assessment to assure compliance with 40 CFR 190 Environmental Radiation Protection Standards for Nuclear Power Operation and an annual land use survey to include but not be limited to water supply information, location and number of occupants, time spent at each location by occupants, amount and

type of locally grown stored feed and amount of pasture consumed by local livestock.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-252-040, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.121 RCW. 81-16-031 (Order 1683), § 402-52-200, filed 7/28/81.]

WAC 246-252-050 Appendix A.

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Hazardous Constituents
Acetonitrile (Ethanenitrile)
Acetophenone (Ethanone, 1-phenyl)
3-(alpha-Acetonylbenzyl)-4-hydroxycoumarin and salts (Warfarin)
2-Acetylaminofluorene (Acetamide, N-(9H-fluoren-2-yl)-)
Acetyl chloride (Ethanoyl chloride)
1-Acetyl-2-thiourea (Acetamide, N-(aminothioxomethyl)-)
Acrolein (2-Propenal)
Acrylamide (2-Propenamide)
Acrylonitrile (2-Propenenitrile)
Aflatoxins
Aldrin (1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a,8b-hexahydro-endo,
  exo-1,4:5,8-Dimethanonaphthalene)
Allyl alcohol (2-Propen-1-ol)
Aluminum phosphide
4-Aminobiphenyl ([1,1'-Biphenyl]-4-amine)
6-Amino-1,1a,2,8,8a,8b-hexahydro-8-(hydroxymethyl)-8a-methoxy-
  5-methyl-carbamate azirino[2',3':3,4] pyrrolo [1,2-a] indole-4,7-
  dione, (ester) (Mitomycin C) (Azirino[2'3':3,4] pyrrolo (1,2-a) in-
                       6-amino-8-[((amino-cabonyl)oxy)methyl]-
  dole-4,7-dione,
  1,1a,2,8,8a,8b-hexahydro-8a methoxy-5-methy-)
5-(Aminomethyl)-3-isoxazolol (3(2H)-Isoxazolone, 5-(aminometh-
  yl)-) 4-Aminopyridine (4-Pyridinamine)
Amitrole (1H-1,2,4-Triazol-3-amine)
Aniline (Benzenamine)
Antimony and compounds, N.O.S.*
Aramite (Sulfurous acid, 2-chloroethyl-, 2-[4-(1,1-dimethylethyl)
  phenoxy]-1-methylethyl ester)
Arsenic and compounds, N.O.S.*
Arsenic acid (Orthoarsenic acid)
Arsenic pentoxide (Arsenic (V) oxide)
Arsenic trioxide (Arsenic (III) oxide)
Auramine (Benzenamine, 4,4'-carbonimidoylbis [N,N-Dimethyl-,
  monohydrochloride)
Azaserine (L-Serine, diazoacetate (ester))
Barium and compounds, N.O.S.*
Barium cvanide
Benz[c]acridine (3,4-Benzacridine)
Benz[a]anthracene (1,2-Benzanthracene)
Benzene (Cyclohexatriene)
Benzenearsonic acid (Arsonic acid, phenyl-)
Benzene, dichloromethyl- (Benzal chloride)
Benzenethiol (Thiophenol)
Benzidine ([1,1'-Biphenyl]-4,4'diamine)
Benzo[b]fluoranthene (2,3-Benzofluoranthene)
Benzo[j]fluoranthene (7,8-Benzofluoranthene)
Benzo[a]pyrene (3,4-Benzopyrene)
p-Benzoquinone (1,4-Cyclohexadienedione)
Benzotrichloride (Benzene, trichloromethyl)
Benzyl chloride (Benzene, (chloromethyl)-)
Beryllium and compounds, N.O.S.3
Bis(2-chloroethoxy)methane (Ethane, 1,1'-[methylenebis(oxy)]bis[2-
  chloro-])
Bis(2-chloroethyl) ether (Ethane, 1,1'-oxybis[2-chloro-])
N,N-Bis(2-chloroethyl)-2-naphthylamine (Chlornaphazine)
Bis(2-chloroisopropyl) ether (Propane, 2,2'-oxybis[2-chloro-])
Bis(chloromethyl) ether (Methane, oxybis[chloro-])
Bis(2-ethylhexyl) phthalate (1,2-Benzenedicarboxylic acid, bis(2-
  ethylhexyl) ester)
Bromoacetone (2-Propanone, 1-bromo-)
Bromomethane (Methyl bromide)
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4-Bromophenyl phenyl ether (Benzene, 1-bromo-4-phenoxy-)

Brucine (Strychnidin-10-one, 2,3-dimethoxy-)

2-Butanone peroxide (Methyl ethyl ketone, peroxide)

Hazardous Constituents

```
Butyl benzyl phthalate (1,2-Benzenedicarboxylic acid, butyl
  phenylmethyl ester)
2-sec-Butyl-4,6-dinitrophenol (DNBP) (Phenol, 2,4-dinitro-6-(1-
  methyl-propyl)-)
Cadmium and compounds, N.O.S.*
Calcium chromate (Chromic acid, calcium salt)
Calcium cvanide
Carbon disulfide (Carbon bisulfide)
Carbon oxyfluoride (Carbonyl fluoride)
Chloral (Acetaldehyde, trichloro-)
Chlorambucil (Butanoic acid, 4-[bis(2-chloroethyl)amino]benzene-)
Chlordane (alpha and gamma isomers) (4,7-Methanoindan,
  1,2,4,5,6,7,8,8-octachloro-3,4,7,7a-tetrahydro-) (alpha and gamma
  isomers)
Chlorinated benzenes, N.O.S.*
Chlorinated ethane, N.O.S.
Chlorinated fluorocarbons, N.O.S.*
Chlorinated naphthalene, N.O.S.*
Chlorinated phenol, N.O.S.*
Chloroacetaldehyde (Acetaldehyde, chloro-)
Chloroalkyl ethers, N.O.S.*
p-Chloroaniline (Benzenamine, 4-chloro-)
Chlorobenzene (Benzene, chloro-)
Chlorobenzilate (Benzeneacetic acid, 4-chloro-alpha-(4-chlorophen-
  yl)-alpha-hydroxy-, ethyl ester)
p-Chloro-m-cresol (Phenol, 4-chloro-3-methyl)
1-Chloro-2,3-epoxypropane (Oxirane, 2-(chloromethyl)-)
2-Chloroethyl vinyl ether (Ethene, (2-chloroethoxy)-)
Chloroform (Methane, trichloro-)
Chloromethane (Methyl chloride)
Chloromethyl methyl ether (Methane, chloromethoxy-)
2-Chloronaphthalene (Naphthalene, betachloro-)
2-Chlorophenol (Phenol, o-chloro-)
1-(o-Chlorophenyl)thiourea (Thiourea, (2-chlorophenyl)-)
3-Chloropropionitrile (Propanenitrile, 3-chloro-)
Chromium and compounds, N.O.S.*
Chrysene (1,2-Benzphenanthrene)
Citrus red No. 2 (2-Naphthol, 1-[(2,5-dimethoxyphenyl)azo]-)
Coal tars
Copper cyanide
Creosote (Creosote, wood)
Cresols (Cresylic acid) (Phenol, methyl-)
Crotonaldehyde (2-Butenal)
Cyanides (soluble salts and complexes), N.O.S.*
Cyanogen (Ethanedinitrile)
Cyanogen bromide (Bromide cyanide)
Cyanogen chloride (Chlorine cyanide)
Cycasin(beta-D-Glucopyranoside, (methyl-ONN-azoxy)methyl-)
2-Cyclohexyl-4,6-dinitrophenol (Phenol, 2-cyclohexyl-4,6-dinitro-)
Cyclophosphamide (2H-1,3,2, -Oxazaphosphorine, [bis(2-chloroethyl)
  amino]-tetrahydro-,2-oxide)
Daunomycin (5,12-Naphthacenedione, (8S-cis)-8-acetyl-10-[(3-
  amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-
  tetrahydro-6,8,11-trihydroxy-1-methox y-)
DDD (Dichlorodiphenyldichloroethane) (Ethane, 1,1-dichloro-2,2-
  bis(p-chlorophenyl)-)
DDE (Ethylene, 1,1-dichloro-2,2-bis(4-chlorophenyl)-)
DDT (Dichlorodiphenyltrichloroethane) (Ethane, 1,1,1-trichloro-2,2-
  bis(p-chlorophenyl)-)
Diallate (S-(2,3-dichloroallyl) diisopropylthiocarbamate)
Dibenz[a,h]acridine (1,2,5,6-Dibenzacridine)
Dibenz[a,j]acridine (1,2,7,8-Dibenzacridine)
Dibenz[a,h]anthracene (1,2,5,6-Dibenzanthracene)
7H-Dibenzo[c,g]carbazole (3,4,5,6-Dibenzcarbazole)
Dibenzo[a,e]pyrene (1,2,4,5-Dibenzpyrene)
Dibenzo[a,h]pyrene (1,2,5,6-Dibenzpyrene)
Dibenzo[a,i]pyrene (1,2,7,8-Dibenzpyrene)
1,2-Dibromo-3-chloropropane (Propane, 1,2-dibromo-3-chloro-)
1,2-Dibromoethane (Ethylene dibromide)
Dibromomethane (Methylene bromide)
Di-n-butyl phthalate (1,2-Benzenedicarboxylic acid, dibutyl ester)
o-Dichlorobenzene (Benzene, 1,2-dichloro-)
m-Dichlorobenzene (Benzene, 1,3-dichloro-)
p-Dichlorobenzene (Benzene, 1,4-dichloro-)
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Hazardous Constituents
Dichlorobenzene, N.O.S.* (Benzene, dichloro-, N.O.S.*)
3,3'-Dichlorobenzidine ([1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-)
1,4-Dichloro-2-butene (2-Butene, 1,4-dichloro-)
Dichlorodifluoromethane (Methane, dichlorodifluoro-)
1,1-Dichloroethane (Ethylidene dichloride)
1,2-Dichloroethane (Ethylene dichloride)
trans-1,2-Dichloroethene (1,2-Dichloroethylene)
Dichloroethylene, N.O.S.* (Ethene, dichloro-, N.O.S.*)
1,1-Dichloroethylene (Ethene, 1,1-dichloro-)
Dichloromethane (Methylene chloride)
2,4-Dichlorophenol (Phenol, 2,4-dichloro-)
2,6-Dichlorophenol (Phenol, 2,6-dichloro-)
2,4-Dichlorophenoxyacetic acid (2,4-D), salts and esters (Acetic acid,
  2,4-dichlorophenoxy-, salts and esters)
Dichlorophenylarsine (Phenyl dichloroarsine)
Dichloropropane, N.O.S.* (Propane, dichloro-, N.O.S.*)
1,2-Dichloropropane (Propylene dichloride)
Dichloropropanol, N.O.S.* (Propanol, dichloro-, N.O.S.*)
Dichloropropene, N.O.S.* (Propene, dichloro-, N.O.S.*)
1,3-Dichloropropene (1-Propene, 1,3-dichloro-)
Dieldin (1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octa-
  hydro-endo, exo-1,4:5,8-Dimethanonaphthalene)
1,2:3,4-diepoxybutane (2,2'-Bioxirane)
Diethylarsine (Arsine, diethyl-)
N,N-Diethylhydrazine (Hydrazine, 1,2-diethyl)
O,O-Diethyl
               S-methyl
                                    of phosphorodithioic
                                                               acid
                           ester
  (Phosphorodithioic acid, O,O-diethyl S-methyl ester)
O,O-Diethylphosphoric acid, O-p-nitrophenyl ester (Phosphoric acid,
  diethyl p-nitrophenyl ester)
Diethyl phthalate (1,2-Benzenedicarboxylic acid, diethyl ester)
O,O-Diethyl O-2-pyrazinyl phosphorothioate (Phosphorothioic acid,
  O,O-diethyl O-pyrazinyl ester)
Diethylstilbesterol (4,4'-Stilbenediol, alpha, alpha-diethyl, bis(di-
  hydrogen phosphate, (E)-)
Dihydrosafrole (Benzene, 1,2-methylenedioxy-4-propyl-)
3,4-Dihydroxy-alpha-(methylamino)methyl benzyl alcohol (1,2-
  Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-)
Dilsopropylfluorophosphate (DFP) (Phosphorofluoridic acid, bis(1-
  methylethyl) ester)
Dimethoate
              (Phosphorodithioic
                                    acid, O,O-dimethyl
  (methylamino)-2-oxoethyl] ester)
3,3'-Dimethoxybenzidine ([1,1'-Biphenyl]-4,4'-diamine, 3-3'-di-
  methoxy-)
p-Dimethylaminoazobenzene (Benzenamine, N,N-dimethyl-4-
  (pheny-
  lazo)-)
7,12-Dimethylbenz[a]anthracene (1,2-Benzanthracene, 7,12-dime-
3,3'-Dimethylbenzidine ([1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
Dimethylcarbamoyl chloride (Carbamoyl chloride, dimethyl-)
1,1-Dimethylhydrazine (Hydrazine, 1,1-dimethyl-)
1,2-Dimethylhydrazine (Hydrazine, 1,2-dimethyl-)
3,3-Dimethyl-1-(methylthio)-2-butanone, O-[(methylamino) carbon-
  yl] oxime (Thiofanox)
alpha, alpha-Dimethylphenethylamine (Ethanamine, 1,1-dimethyl-2-
  phenyl-)
2,4-Dimethylphenol (Phenol, 2,4-dimethyl-)
Dimethyl phthalate (1,2-Benzenedicarboxylic acid, dimethyl ester)
Dimethyl sulfate (Sulfuric acid, dimethyl ester)
Dinitrobenzene, N.O.S.* (Benzene, dinitro-, N.O.S.*)
4,6-Dinitro-o-cresol and salts (Phenol, 2,4-dinitro-6-methyl-, and
2,4-Dinitrophenol (Phenol, 2,4-dinitro-)
2,4-Dinitrotoluene (Benzene, 1-methyl-2,4-dinitro-)
2,6-Dinitrotoluene (Benzene, 1-methyl-2,6-dinitro-)
Di-n-octyl phthalate (1,2-Benzenedicarboxylic acid, dioctyl ester)
1,4-Dioxane (1,4-Diethylene oxide)
Diphenylamine (Benzenamine, N-phenyl-)
1,2-Diphenylhydrazine (Hydrazine, 1,2-diphenyl-)
Di-n-propylnitrosamine (N-Nitroso-di-n-propylamine)
Disulfoton (O,O-diethyl S-[2-(ethylthio)ethyl] phosphorodithioate)
2,4-Dithiobiuret (Thioimidodicarbonic diamide)
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Hazardous Constituents

Endosulfan (5-Norbornene, 2,3-dimethanol, 1,4,5,6,7,7-hexachloro-, cyclic sulfite) Endrin and metabolites (1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,endo-1,4:5,8dimethanonaphthalene, and metabolites) Ethyl carbamate (Urethan) (Carbamic acid, ethyl ester) Ethyl cyanide (propanenitrile) Ethylenebisdithiocarbamic acid, salts and esters (1,2-Ethanediylbiscarbamodithioic acid, salts and esters) Ethyleneimine (Aziridine) Ethylene oxide (Oxirane) Ethylenethiourea (2-Imidazolidinethione) Ethyl methacrylate (2-Propenoic acid, 2-methyl-, ethyl ester) Ethyl methanesulfonate (Methanesulfonic acid, ethyl ester) Fluoranthene (Benzo[j,k]fluorene) Fluorine

2-Fluoroacetamide (Acetamide, 2-fluoro-)

Fluoroacetic acid, sodium salt (Acetic acid, fluoro-, sodium salt)

Formaldehyde (Methylene oxide) Formic acid (Methanoic acid)

Glycidylaldehyde (1-Propanol-2,3-epoxy)

Halomethane, N.O.S.*

Heptachlor (4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-)

Heptachlor epoxide (alpha, beta, and gamma isomers) (4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7-tetrahydro-, alpha, beta, and gamma isomers)

Hexachlorobenzene (Benzene, hexachloro-)

Hexachlorobutadiene (1,3-Butadiene, 1,1,2,3,4,4-hexachloro-)

Hexachlorocyclohexane (all isomers) (Lindane and isomers)

Hexachlorocyclopentadiene (1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-)

Hexachloroethane (Ethane, 1,1,1,2,2,2-hexachloro-)

1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo, endo-dimethanonaphthalene (Hexachlorohexa-hydro-endo, endodimethanonaphthalene)

Hexachlorphene (2,2'-Methylenebis(3,4,6-trichlorphenol)

Hexachloropropene (1-Propene, 1,1,2,3,3,3-hexachloro-)

Hexaethyl tetraphosphate (Tetraphosphoric acid, hexaethyl ester)

Hydrazine (Diamine)

Hydrocyanic acid (Hydrogen cyanide)

Hydrofluoric acid (Hydrogen fluoride)

Hydrogen sulfide (Sulfur hydride)

Hydroxydimethylarsine oxide (Cacodylic acid)

Indeno (1,2,3-cd)pyrene (1,10-(1,2-phenylene)pyrene)

Iodomethane (Methyl iodide) Iron dextran (Ferric dextran)

Isocyanic acid, methyl ester (Methyl isocyanate)

Isobutyl alcohol (1-Propanol, 2-methyl-)

Isosafrole (Benzene, 1,2-methylenedioxy-4-allyl-)

Kepone (Decachlorooctahydro-1,3,4-Methano-2H-cyclobut-

a[cd]pentalen-2-one) Lasiocarpine (2-Butenoic acid, 2-methyl-,7-[(2,3-dihydroxy-2-(1methoxyethyl)-3-methyl-1-oxobutoxy)methyl]-2,3,5,7a-

tetrahydro-1H-pyrrolizin-1-yl ester)

Lead and compounds, N.O.S.*

Lead acetate (Acetic acid, lead salt)

Lead phosphate (Phosphoric acid, lead salt)

Lead subacetate (Lead, bis(acetato-0)tetrahydroxytri-)

Maleic anhydride (2,5-Furandione)

Maleic hydrazide (1,2-Dihydro-3,6-pyridazinedione)

Malononitrile (Propanedinitrile)

Melphalan (Alanine, 3-[p-bis(2-chloroethyl)amino]phenyl-,L-)

Mercury fulminate (Fulminic acid, mercury salt)

Mercury and compounds, N.O.S.*

Methacrylonitrile (2-Propenenitrile, 2-methyl-)

Methanethiol (Thiomethanol)

Methapyrilene (Pyridine, 2-[(2-dimethylamino)ethyl]-2-thenylamino-)

Metholmyl (Acetimidic acid, N-[(methylcarbamoyl)oxy]thio-, methyl ester)

Methoxychlor (Ethane, 1,1,1-trichloro-2,2'-bis(p-methoxyphenyl)-) 2-Methylaziridine (1,2-Propylenimine)

Hazardous Constituents

3-Methylcholanthrene (Benz[j]aceanthrylene, 1,2-dihydro-3methyl-)

Methyl chlorocarbonate (Carbonochloridic acid, methyl ester)

4,4'-Methylenebis(2-chloroaniline) (Benzenamine, 4,4'-methylenebis-(2-chloro-)

Methyl ethyl ketone (MEK) (2-Butanone)

Methyl hydrazine (Hydrazine, methyl-)

2-Methyllactonitrile (Propanenitrile, 2-hydroxy-2-methyl-)

Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)

Methyl methanesulfonate (Methanesulfonic acid, methyl ester)

2-Methyl-2-(methylthio)propionaldehyde-o-(methylcarbonyl) oxime (Propanal, 2-methyl-2-(methylthio)-, 0-[(methylamino)carbonyl]oxime)

N-Methyl-N'-nitro-N-nitrosoguanidine (Guanidine, N-nitroso-Nmethyl-N'-nitro-)

Methyl parathion (0,0-dimethyl 0-(4-nitrophenyl) phosphorothioate)

Methylthiouracil (4-1 H-Pyrimidinone, 2,3-dihydro-6-methyl-2thioxo-)

Molybdenum and compounds, N.O.S.*

Mustard gas (Sulfide, bis(2-chloroethyl)-)

Naphthalene

1,4-Naphthoquinone (1, 4-Naphthalenedione)

1-Naphthylamine (alpha-Naphthylamine)

2-Naphthylamine (beta-Naphthylamine)

1-Naphthyl-2-thiourea (Thiourea, 1-naphthalenyl-)

Nickel and compounds, N.O.S.

Nickel carbonyl (Nickel tetracarbonyl)

Nickel cyanide (Nickel (II) cyanide)

Nicotine and salts (Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts)

Nitric oxide (Nitrogen (II) oxide)

p-Nitroaniline (Benzenamine, 4-nitro-)

Nitrobenzine (Benzene, nitro-)

Nitrogen dioxide (Nitrogen (IV) oxide)

Nitrogen mustard and hydrochloride salt (Ethanamine, 2-chloro-, N-(2-chloroethyl) - N-methyl-, and hydrochloride salt)

Nitrogen mustard N-Oxide and hydrochloride salt (Ethanamine, 2chloro- N-(2-chloroethyl)-N-methyl-, and hydrochloride salt)

Nitroglycerine (1,2,3-Propanetriol, trinitrate)

4-Nitrophenol (Phenol, 4-nitro-)

4-Nitroquinoline-1-oxide (Quinoline, 4-nitro-1-oxide-)

Nitrosamine, N.O.S.*

N-Nitrosodi-n-butylamine (1-Butanamine, N-butyl-N-nitroso-)

N-Nitrosodiethanolamine (Ethanol, 2,2'-(nitrosoimino)bis-)

N-Nitrosodiethylamine (Ethanamine, N-ethyl-N-nitroso-)

N-Nitrosodimethylamine (Dimethylnitrosamine)

N-Nitroso-N-ethylurea (Carbamide, N-ethyl-N-nitroso-) N-Nitrosomethylethylamine (Ethanamine, N-methyl-N-nitroso-)

N-Nitroso-N-methylurea (Carbamide, N-methyl-N-nitroso-)

N-Nitroso-N-methylurethane (Carbamic acid, methylnitroso-, ethyl

N-Nitrosomethylvinylamine (Ethenamine, N-methyl-N-nitroso-)

N-Nitrosomorpholine (Morpholine, N-nitroso-)

N-Nitrosonornicotine (Nornicotine, N-nitroso-)

N-Nitrosopiperidine (Pyridine, hexahydro-, N-nitroso-)

Nitrosopyrrolidine (Pyrrole, tetrahydro-, N-nitroso-)

N-Nitrososarcosine (Sarcosine, N-nitroso-) 5-Nitro-o-toluidine (Benzenamine, 2-methyl-5-nitro-)

Octamethylpyrophosphoramide (Diphosphoramide, octamethyl-)

Osmium tetroxide (Osmium (VIII) oxide)

7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid (Endothal)

Paraldehyde (1,3,5-Trioxane, 2,4,6-trimethyl-)

Parathlon (Phosphorothioic acid, 0,0-diethyl 0-(p-nitrophenyl)ester)

Pentachlorobenzene (Benzene, pentachloro-) Pentachloroethane (Ethane, pentachloro-)

Pentachloronitrobenzene (PCNB) (Benzene, pentachloronitro-)

Pentachlorophenol (Phenol, pentachloro-)

Phenacetin (Acetamide, N-(4-ethoxyphenyl)-)

Phenol (Benzene, hydroxy-)

Phenylenediamine (Benzenediamine)

Phenylmercury acetate (Mercury, acetatophenyl-)

N-Phenylthiourea (Thiourea, phenyl-)

Phosgene (Carbonyl chloride)

Phosphine (Hydrogen phosphide)

WAC

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Hazardous Constituents

Phosphorodithioic acid, 0,0-diethyl S-[(ethylthio)methyl] ester (Phorate) Phosphorothioic acid, 0,0-dimethyl 0-[p-((dimethylamino)sulfonyl)phenyl] ester (Famphur) Phthalic acid esters, N.O.S.* (Benzene, 1, 2-dicarboxylic acid, esters, N.O.S.*) Phthalic anhydride (1,2-Benzenedicarboxylic acid anhydride) 2-Picoline (Pyridine, 2-methyl-) Polychlorinated biphenyl, N.O.S.* Potassium cyanide Potassium silver cyanide (Argentate(1-), dicyano-, potassium) Pronamide (3,5-Dichloro-N-(1,1-dimethyl-2-propynyl)benzamide) 1,3-Propane sultone (1,2-Oxathiolane, 2,2-dioxide) n-Propylamine (1-Propanamine) Propylthiouracil (Undecamethylenediamine, N,N'-bis(2-chlorobenzyl-), dihydrochloride) 2-Propyn-1-ol (Propargyl alcohol) Pyridine Radium -226 and -228 Reserpine (Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[3,4, 5-trimethoxybenzoyl)oxy]-, methyl ester) Resorcinol (1,3-Benzenediol) Saccharin and salts (1,2-Benzoisothiazolin-3-one, 1,1-dioxide, and salts) Safrole (Benzene, 1,2-methylenedioxy-4-allyl-) Selenious acid (Selenium dioxide) Selenium and compounds, N.O.S.* Selenium sulfide (Sulfur selenide) Selenourea (Carbamimidoselenoic acid) Silver and compounds, N.O.S.* Silver cyanide Sodium cyanide Streptozotocin (D-Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-) Strontium sulfide Strychnine and salts (Strychnidin-10-one, and salts) 1,2,4,5-Tetrachlorobenzene (Benzene, 1,2,4,5-tetrachloro-) 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) (Dibenzo-p-dioxin, 2,3,7,8-tetrachloro-) Tetrachloroethane, N.O.S.* (Ethane, tetrachloro-, N.O.S.*) 1,1,1,2-Tetrachlorethane (Ethane, 1,1,1,2-tetrachloro-) 1,1,2,2-Tetrachlorethane (Ethane, 1,1,2,2-tetrachloro-) Tetrachloroethane (Ethane, 1,1,2,2-tetrachloro-) Tetrachloromethane (Carbon tetrachloride) 2,3,4,6,-Tetrachlorophenol (Phenol, 2,3,4,6-tetrachloro-) Tetraethyldithiopyrophosphate (Dithiopyrophosphoric acid, tetraethylester) Tetraethyl lead (Plumbane, tetraethyl-) Tetraethylpyrophosphate (Pyrophosphoric acid, tetraethyl ester) Tetranitromethane (Methane, tetranitro-) Thallium and compounds, N.O.S.* Thallic oxide (Thallium (III) oxide) Thallium (I) acetate (Acetic acid, thallium (I) salt) Thallium (I) carbonate (Carbonic acid, dithallium (I) salt) Thallium (I) chloride Thallium (I) nitrate (Nitric acid, thallium (I) salt) Thallium selenite Thallium (I) sulfate (Sulfuric acid, thallium (I) salt) Thioacetamide (Ethanethioamide) Thiosemicarbazide (Hydrazinecarbothioamide) Thiourea (Carbamide thio-) Thiuram (Bis(dimethylthiocarbamoyl) disulfide) Thorium and compounds, N.O.S.*, when producing thorium byproduct material Toluene (Benzene, methyl-) Toluenediamine (Diaminotoluene) o-Toluidine hydrochloride (Benzenamine, 2-methyl-, hydrochloride) Tolylene diisocyanate (Benzene, 1,3-diisocyanatomethyl-) Toxaphene (Camphene, octachloro-) Tribromomethane (Bromoform) 1,2,4-Trichlorobenzene (Benzene, 1,2,4-trichloro-) 1,1,1-Trichloroethane (Methyl chloroform) 1,1,2-Trichloroethane (Ethane, 1,1,2-trichloro-) Trichloroethene (Trichloroethylene)

Hazardous Constituents

Trichloromethanethiol (Methanethiol, trichloro-) Trichloromonoflouromethane (Methane, trichlorofluoro-) 2,4,5-Trichlorophenol (Phenol, 2,4,5-trichloro-) 2,4,6-Trichlorophenol (Phenol, 2,4,6-trichloro-) 2,4,5-Trichlorophenoxyacetic acid (2,4,5-T) (Acetic acid, 2,4,5trichlorophenoxy-) 2,4,5-Trichlorophenoxypropionic acid (2,4,5-TP) (Silvex) (Propionoic acid, 2-(2,4,5-trichlorophenoxy)-) Trichloropropane, N.O.S.* (Propane, trichloro-, N.O.S.*) 1,2,3—Trichloropropane (Propane, 1,2,3—trichloro—) 0,0,0—Triethyl phosphorothioate (Phosphorothioic acid, 0,0,0—triethyl sym-Trinitrobenzene (Benzene, 1,3,5-trinitro-) Tris(1-azridinyl) phosphine sulfide (Phosphine sulfide, tris(1aziridinyl-) Tris(2,3-dibromopropyl) phosphate (1-Propanol, 2,3-dibromo-, phosphate) Trypan blue (2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl (1,1'-biphenyl)- 4,4'-diyl)bis(azo)]bis(5-amino-4-hydroxy-, tetrasodium salt) Uracil mustard (Uracil 5-[bis(2-chloroethyl)amino]-) Uranium and compounds, N.O.S.3 Vanadic acid, ammonium salt (ammonium vanadate) Vanadium pentoxide (Vanadium (V) oxide) Vinyl chloride (Ethene, chloro-) Zinc cyanide Zinc phosphide

The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class not specifically listed by name in this list.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–252–050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–52–300, filed 12/11/86.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

Chapter 246-254 WAC RADIATION PROTECTION-FEES

Purpose and scope

270-234-001	I di pose and scope.
246-254-010	Definitions.
246-254-020	Payment of fees.
246-254-030	Small business discount provision and optional fee
	payment schedule applicable to radioactive materi-
	als licensees.
246-254-050	Method of payment.
246-254-053	Radiation machine facility registration fees.
246-254-057	License fees for radioactive materials.
246-254-058	Fees for additional service.
246-254-120	Fees for licensing and compliance actions.
246-254-130	Radioactive waste disposal site surveillance fee.
246-254-150	Fees for perpetual care and maintenance.
246-254-160	Fees for airborne emissions of radioactive materials.
246-254-170	Failure by applicant or licensee to pay prescribed
	fees.
246-254-999	Site use permit fee.

WAC 246-254-001 Purpose and scope. This chapter establishes fees charged for licensing and inspection services rendered by the office of radiation protection as authorized under RCW 70.121.030. These fees apply to owners and operators of uranium or thorium milling operations and their associated tailings or waste.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-254-001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87-01-031 (Order 2450), § 402-70-

010, filed 12/11/86; 79-12-073 (Order 1459), § 402-70-010, filed 11/30/79, effective 1/1/80.]

WAC 246-254-010 **Definitions.** As used in this chapter, the following definitions apply:

- (1) "Application" means a completed RHF-1 or equivalent with supporting documentation requesting the department to grant authority to receive, possess, use, transfer, own or acquire radioactive materials.
- (2) "Department" means the department of social and health services which has been designated as the state radiation control agency.
- (3) "Inspection" means an official examination or observation by the department including but not limited to tests, surveys and monitoring to determine compliance with rules, regulations, orders, requirements and conditions of the department.
- (4) "License" means a license issued by the department in accordance with the regulations adopted by the department.
- (5) "Perpetual care and maintenance" means further maintenance, surveillance or other care of milling or tailings impoundment sites after termination of the site operator's decommissioning responsibilities and license.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–254–010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–70–020, filed 12/11/86; 79–12–073 (Order 1459), § 402–70–020, filed 11/30/79, effective 1/1/80.]

WAC 246-254-020 Payment of fees. (1) Application: Each application shall be accompanied by a remittance in the full amount of the initial application fee. No application will be processed prior to payment of the full amount specified. Applications for which no remittance is received may be returned to the applicant. The applicant shall pay any additional actual costs involved with processing the application, and will be billed on a calendar quarter basis. The initial application fee shall be a credit to the applicant's quarterly billings.

- (2) Operations: A charge shall be made to each uranium or thorium milling operation covering the actual expenses incurred by the department in determining compliance with the provisions of established regulations and conditions of the license. The licensee will be billed each calendar quarter until the license is terminated by the department. The quarterly bills will delineate the manpower, laboratory and support service costs associated with routine regulatory activities completed by the department.
- (3) Amendment: The actual costs incurred in reviewing and processing an amendment to a license will be added to and included with the department's calendar quarter charge for routine regulatory activities.
- (4) Renewal: The actual costs incurred in reviewing and processing an application for renewal will be added to and included with the department's calendar quarter charge for routine regulatory activities.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \$246-254-020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), \$402-70-030, filed 12/11/86; 79–12–073 (Order 1459), \$402-70-030, filed 11/30/79, effective 1/1/80.]

- WAC 246-254-030 Small business discount provision and optional fee payment schedule applicable to radioactive materials licensees. (1) Small business may receive a twenty-five percent discount on radioactive materials license fees due on or after June 30, 1986. (See WAC 440-44-057(2) for fee amount.)
 - (2) To qualify for the discount, the business shall:
- (a) Be a corporation, partnership, sole proprietorship, or other legal entity formed for the purpose of making a profit;
- (b) Be independently owned and operated from all other businesses (i.e., not a subsidiary of a parent company); and
 - (c) Have fifty or fewer employees.
- (3) To receive the discount, the license applicant at the time of initial license request, or the licensee at the time of annual billing shall:
- (a) Certify, on the business' letterhead or appropriate departmental form, the conditions in subsection (2) of this section have been met;
- (b) Sign the certification as the chief executive officer of the business or as an official designee;
 - (c) Have the certification notarized;
 - (d) Enclose the payment with the certification; and
- (e) Submit the certification and payment in accordance with instructions provided by the department.
- (4) The department may verify certifications and will suspend any radioactive materials license if the applicant/licensee:
 - (a) Failed to pay the required fee; or
 - (b) Made an invalid or false certification.
- (5) Upon request of any radioactive materials licensee or license applicant, the department may accept semiannual or quarterly payments in lieu of the required annual license fee, provided:
- (a) A written payment schedule setting specific due dates and payment amounts is submitted; and
- (b) The total payments per the schedule equal the fee in effect at the time such fee payment schedule is accepted by the department.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-254-030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 43.20A.055. 86-12-039 (Order 2382), § 440-44-059, filed 5/30/86.]

- WAC 246-254-050 Method of payment. (1) Fee payments shall be by check, draft or money order made payable to the department of social and health services.
- (2) Fees are due and payable upon submission of the application for license or within thirty days of receipt of a bill for actual costs incurred per calendar quarter.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \S 246–254–050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), \S 402–70–050, filed 12/11/86; 79–12–073 (Order 1459), \S 402–70–050, filed 11/30/79, effective 1/1/80.]

WAC 246-254-053 Radiation machine facility registration fees. (1) Persons owning and/or leasing and using radiation-producing machines shall submit a fifty dollar registration fee to the department at the time of application and every two years thereafter. In addition:

- (a) For dentists, veterinarians, and podiatrists, add:
- (i) Sixty dollars for the first tube; and
- (ii) Twenty dollars for each additional tube.
- (b) For hospitals and medical or chiropractic facilities, add:
 - (i) One hundred eighty dollars for the first tube; and
 - (ii) Sixty dollars for each additional tube.
 - (c) For industrial, research, and other uses, add:
 - (i) One hundred dollars for the first tube; and
 - (ii) Thirty dollars for each additional tube.
- (2) The department shall charge a maximum of three thousand dollars total fee for any facilities under one administration.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–254–053, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 43.20B.110. 89–16–064 (Order 2839), § 440–44–050, filed 7/31/89, effective 8/31/89. Statutory Authority: RCW 43.20A.055. 86–08–054 (Order 2359), § 440–44–050, filed 3/28/86. Statutory Authority: Chapter 70.98 RCW and 1985 c 383. 85–20–021 (Order 2283), § 440–44–050, filed 9/23/85. Statutory Authority: RCW 43.20A.055. 85–13–007 (Order 2238), § 440–44–050, filed 6/7/85; 83–12–058 (Order 1965), § 440–44–050, filed 6/1/83. Statutory Authority: 1982 c 201. 82–13–011 (Order 1825), § 440–44–050, filed 6/4/82.]

- WAC 246-254-057 License fees for radioactive materials. (1) The department shall charge a fee for each radioactive materials license based on the single highest fee category which describes activities subject to the conditions of the license. When multiple licenses are required, the department shall charge the applicable license fee for each. The department may require multiple licenses based upon:
 - (a) Physical separation of operations;
- (b) Organizational separations within a licensee's operation; or
 - (c) Possession of special nuclear material.
- (2) FEE CATEGORIES. Persons licensed or authorized to possess or use radioactive materials shall forward fees to the department as follows:
- (a) For operation of a radioactive waste facility allowing processing, volume reduction, or waste treatment, but not allowing commercial on-site disposal: Annual fee of six thousand four hundred ten dollars.
- (b) For operation of a nuclear pharmacy: Annual fee of two thousand six hundred ten dollars.
- (c) For operation of a mobile nuclear medicine program: Annual fee of two thousand six hundred dollars.
- (d) For operation of a nuclear laundry: Annual fee of four thousand eight hundred eighty dollars.
- (e) For licenses authorizing one curie or more of unsealed radioactive material in the manufacture and distribution of radioactive products or devices containing radioactive material: Annual fee of four thousand five hundred thirty dollars.
- (f) For licenses authorizing manufacturing utilizing less than one curie of unsealed radioactive material or any quantity of previously sealed sources and distribution of products or devices containing radioactive material: Annual fee of one thousand six hundred ten dollars.
- (g) For licenses authorizing decontamination services: Annual fee of two thousand three hundred ten dollars.

- (h) For licenses authorizing waste brokerage including the possession, temporary storage, and over-packing only of radioactive waste: Annual fee of one thousand four hundred ninety dollars.
- (i) For licenses authorizing equipment servicing involving incidental use of calibration sources, for maintenance of equipment containing radioactive material, or possession of sealed sources for the purpose of sales demonstration only: Annual fee of six hundred ninety dollars.
- (j) For licenses authorizing health physics services, leak testing, or calibration services: Annual fee of one thousand two hundred seventy dollars.
- (k) For civil defense licenses: Annual fee of eight hundred dollars.
- (1) For licenses authorizing possession of atomic numbers three through eighty—three with maximum authorized possession of any single isotope greater than or equal to 1 curie: Annual fee of nine thousand seven hundred dollars.
- (m) For licenses authorizing possession of atomic numbers three through eighty—three with maximum authorized possession of any single isotope greater than 0.1 curie but less than 1 curie: Annual fee of four thousand three hundred sixty dollars.
- (n) For licenses authorizing possession of atomic numbers three through eighty—three with maximum authorized possession less than or equal to 0.1 curie: Annual fee of three thousand six hundred dollars.
- (o) For medical licenses authorizing one or more of Groups II-VI, as defined in WAC 402-22-200 Schedule A.
- (i) For licenses authorizing Group II and III (diagnostic nuclear medicine): Annual fee of one thousand seven hundred eighty dollars.
- (ii) For licenses authorizing Group IV and V (unlimited medical therapy): Annual fee of one thousand four hundred eighty dollars.
- (iii) For licenses authorizing Group II or III and Group IV or V: Annual fee of two thousand four hundred thirty dollars.
- (iv) For licenses authorizing Group VI (unlimited brachytherapy): Annual fee of one thousand two hundred seventy dollars.
- (p) For licenses authorizing brachytherapy or teletherapy: Annual fee of seven hundred forty dollars.
- (q) For licenses authorizing medical or veterinarian possession of greater than 200 millicuries total possession of radioactive material: Annual fee of one thousand one hundred ninety dollars.
- (r) For licenses authorizing medical or veterinarian possession of greater than 30 millicuries but less than or equal to 200 millicuries total possession of radioactive material: Annual fee of nine hundred sixty dollars.
- (s) For licenses authorizing medical or veterinarian possession of less than or equal to 30 millicuries total possession of radioactive material: Annual fee of seven hundred dollars.
- (t) For licenses authorizing Group I as defined in WAC 402-22-200 Schedule A or *in vitro* uses of radioactive materials: Annual fee of six hundred sixty dollars.

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- (u) For licenses authorizing possession of special nuclear material as pacemakers or depleted uranium as shielding: Annual fee of two hundred fifty dollars.
- (v) For licenses authorizing the use of radiographic exposure devices in a permanent radiographic facility (vault) only: Annual fee consisting of three thousand one hundred forty dollars.
- (w) For licenses authorizing the use of radiographic exposure devices at temporary job sites: Annual fee of three thousand seven hundred sixty dollars.
- (x) For licenses authorizing well-logging activities including the use of radioactive tracers: Annual fee of one thousand four hundred seventy dollars.
- (y) For licenses authorizing possession of unsealed sources in the following amounts:
- (i) Greater than or equal to 1 millicurie of I-125 or I-131 or greater than or equal to 100 millicuries of H-3 or C-14 or greater than or equal to 10 millicuries of any single isotope: Annual fee of one thousand nine hundred ninety dollars.
- (ii) Greater than 0.1 millicurie but less than 1 millicurie of I-125 or I-131 or greater than 10 millicuries but less than 100 millicuries of H-3 or C-14 or greater than 1 millicurie but less than 10 millicuries of any other single isotope: Annual fee of nine hundred sixty dollars.
- (iii) Less than or equal to 0.1 millicurie of I-125 or I-131 or less than or equal to 10 millicuries of H-3 or C-14 or less than or equal to 1 millicurie of any other single isotope: Annual fee of seven hundred fifty dollars.
- (z) For licenses authorizing possession of portable sealed sources (such as moisture/density gauges but excluding radiographic exposure devices): Annual fee of three hundred eighty dollars.
- (aa) For licenses authorizing possession of any nonportable sealed source, including special nuclear material but excluding radioactive material used in a gas chromatograph: Annual fee of four hundred ten dollars.
- (bb) For licenses authorizing possession of gas chromatograph units containing radioactive material: Annual fee of two hundred eighty dollars.
- (cc) For licenses authorizing possession of any self-shielded or pool type irradiator with sealed source greater than 100 curies: Annual fee of seven hundred fifty dollars.
- (dd) For licenses authorizing possession of sealed sources for a walk-in type irradiator: Annual fee of one thousand one hundred eighty dollars.
- (ee) For licenses authorizing possession of greater than 1 gram of unsealed special nuclear material or greater than 500 kilograms of source material: Annual fee of three thousand five hundred fifty dollars.
- (ff) For licenses authorizing possession of less than or equal to 1 gram of unsealed special nuclear material or less than or equal to 500 kilograms of source material: Annual fee of one thousand one hundred fifty dollars.
- (gg) For *in vitro* registrants (requiring filing of form RHF-15): Annual fee of forty dollars.
- (hh) For depleted uranium registrants (requiring filing of form RHF-20): Annual fee of forty dollars.

- (ii) For licenses issued to mineral processors for naturally occurring radioactive material in excess of exempt concentrations:
- (i) License application fee, as defined in chapter 402–70 WAC, not to exceed twenty-seven thousand dollars plus
- (ii) The actual cost of the service provided by the department paid in quarterly payments equal to the cost incurred by the department during the previous calendar quarter. This quarterly fee: (A) Shall not exceed forty thousand dollars in any calendar quarter, and (B) shall cover the full cost of regulatory services incurred by the department and its contractors including the department cost of determining and assuring compliance with the provisions of the State Environmental Policy Act.
- (3) The department shall charge fees for reciprocal recognition of out-of-state licenses as follows:
- (a) Fee equal to one hundred percent of the fee specified for an in-state license as described in subsection (2) of this section;
- (b) Fee based upon the actual amount of radioactive material or type of devices requested to be brought into the state; and
- (c) Payment of fee authorizes possession and use in the state of Washington for up to one hundred eighty days of the twelve-month period following payment of the fee.
 - (4) Each licensee shall:
 - (a) Remit the full annual fee for the license:
 - (i) As specified in subsection (2) of this section; and
- (ii) At least thirty days prior to the annual anniversary date; or
- (iii) On a payment schedule as provided in WAC 440-44-059(5);
- (b) Consider the annual anniversary to be the month and day of the expiration date of the existing radioactive materials license.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–254–057, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 43.20A.055. 87–21–016 (Order 2545), § 440–44–057, filed 10/9/87; 86–08–054 (Order 2359), § 440–44–057, filed 3/28/86; 85–13–007 (Order 2238), § 440–44–057, filed 6/7/85; 85–06–024 (Order 2209), § 440–44–057, filed 2/27/85. Statutory Authority: RCW 70.98.080. 83–24–014 (Order 2050), § 440–44–057, filed 11/30/83. Statutory Authority: RCW 43.20A.055. 83–12–058 (Order 1965), § 440–44–057, filed 6/1/83. Statutory Authority: 1982 c 201. 82–17–021 (Order 1860), § 440–44–057, filed 8/9/82.]

- WAC 246-254-058 Fees for additional service. (1) In addition to the fee for each radioactive materials license as described in WAC 440-44-057, a licensee will be charged a service fee for each additional service performed.
 - (2) Definitions.
- (a) "Compliance inspection." A compliance inspection is a routinely scheduled visit to the licensee's facility and/or temporary job site(s) for the purpose of determining compliance with the license and applicable regulations. This service is covered by the annual fee.
- (b) "Investigation." An investigation is an on-site visit of a licensee's facility or site of operation when, in the department's judgment, it is required for the purpose of

reviewing specific conditions, allegations, or other information regarding unusual conditions, operations, or practices. This service is covered by the annual fee.

- (c) "Follow-up inspection." A follow-up inspection is an on-site visit to a licensee's facility, required to verify licensee corrective actions when, in the department's judgment, the preceding compliance inspection or investigation revealed health and safety concerns or significant items of noncompliance which must be corrected. The first follow-up inspection is covered by the annual fee.
- (d) "Environmental cleanup monitoring." Environmental cleanup monitoring is an on-site visit by the department to a licensee's facility or site of operation to determine the status of corrective actions to remove environmental radiation contamination resulting from the licensee's operation. Such a monitoring visit may include, but is not limited to, the review of the licensee's records pertaining to the environmental cleanup, observation of the licensee's cleanup work, sampling by the department for analysis, associated laboratory work, and the analysis of the information collected by the department.
- (e) "New license application." A new license application is a request to use radioactive material from a person not currently a licensee or from a current licensee requesting authorization to use radioactive material in a new way such that a change of fee category is required.
- (f) "Sealed source and device evaluation." A sealed source and device evaluation is a radiological safety evaluation performed by the department on the design, manufacture, and test data of any single sealed source and/or device model for the purpose of registering the sealed source or device with the United States Nuclear Regulatory Commission.
- (g) "Direct staff time." Direct staff time is all work time directly applicable to or associated with a specific licensee and includes license file review, inspection preparation, on-site visits, report writing, review and acknowledgement of correspondence, review of license applications, renewals and amendment requests, telephone contacts, and staff or management conferences specifically related to the license. Travel time is not considered direct staff time.
 - (3) Schedule of fees for additional services.
- (a) For a second follow-up inspection and each additional follow-up inspection the licensee will be charged a fee equal to the number of hours in half-hour increments of direct staff time associated with each follow-up inspection at the rate of sixty-five dollars per hour, but not to exceed a maximum of five hundred twenty dollars per follow-up inspection.
- (b) For each environmental cleanup monitoring visit, the licensee will be charged a fee equal to the number of hours in half—hour increments of direct staff time associated with each environmental cleanup monitoring visit at the rate of sixty—five dollars per hour, but not to exceed a maximum of one thousand six hundred twenty—five dollars per visit.

- (c) For each new license application, the fee will be one hundred thirty dollars in addition to the required annual fee as specified in WAC 440-44-057.
- (d) For each sealed source and device evaluation, the licensee will be charged a fee equal to the number of hours in half-hour increments of direct staff time associated with each sealed source and device evaluation at the rate of sixty-five dollars per hour, but not to exceed a maximum of two thousand dollars per evaluation.
- (4) Failure to pay the additional service fee within sixty days of the date of the billing will result in departmental action to modify, suspend, or terminate the license or sealed source and device registration.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-254-058, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 43.20A.055. 85-13-007 (Order 2238), § 440-44-058, filed 6/7/85.]

- WAC 246-254-120 Fees for licensing and compliance actions. (1) Licenses specifically authorizing the receipt, possession or use of natural uranium and its decay daughters for the extraction of uranium or thorium compounds or for the reclamation and disposal of the associated tailings or waste shall be subject to quarterly payment of expenses incurred by the department. Expenses of the department include those activities which determine licensee's compliance with terms and conditions of the license, review licensing requests and requirements, or maintain a uranium mill program which is compatible with the requirements of the United States Nuclear Regulatory Commission.
- (2) The initial application fee shall be twenty-five thousand dollars. Annual costs shall not exceed ninety thousand dollars for any licensee, except when an environmental impact statement shall be prepared in accordance with chapter 173–11 WAC in which case annual costs shall not exceed two hundred thousand dollars for any licensee.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–254–120, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–70–070, filed 12/11/86; 79–12–073 (Order 1459), § 402–70–070, filed 11/30/79, effective 1/1/80.]

- WAC 246-254-130 Radioactive waste disposal site surveillance fee. (1) The department shall charge a fee for radioactive waste site surveillance.
- (2) The fee shall be an added charge on each cubic foot of low-level waste disposed at the disposal site.
- (3) The department shall authorize by contract the operator of a low-level radioactive waste disposal site to collect the fee from waste generators and brokers.
- (4) The department shall provide for reimbursement to the site operator for collection costs.
- (5) The department shall calculate the fee collected from waste generators and brokers as required under RCW 70.98.085 and the fee shall not exceed the statutory limit specified in that section.
- (6) The site operator shall remit the fee to the department as follows:
- (a) Quarterly for the first seven quarters of each biennium.

(b) By July 15 for the final quarter of the biennium. [Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–254–130, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.085. 90–11–126 (Order 050), § 402–70–073, filed 5/23/90, effective 6/23/90.]

WAC 246-254-150 Fees for perpetual care and maintenance. Licenses specifically authorizing the receipt, possession, or use of natural uranium and its decay daughters for the extraction of uranium or thorium compounds or for the reclamation and disposal of the associated tailings or waste shall be subject to quarterly payments of twenty cents per kilogram of uranium or thorium compound milled out of the raw ore. This payment is due thirty days after the end of each calendar quarter. A minimum charge of two hundred fifty thousand dollars (1978 dollars) accrued as specified in WAC 402-22-070 (6)(d) to cover the costs of long-term surveillance shall be paid by each mill operator to the department prior to the termination of a uranium or thorium mill license. The maximum amount paid by each licensee for perpetual care and maintenance shall not exceed one million dollars.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–254–150, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–70–080, filed 12/11/86.]

WAC 246-254-160 Fees for airborne emissions of radioactive materials. (1) The department shall include fees for emission sources at facilities licensed by the department, as part of the license fees specified in WAC 440-44-057.

- (2) For emission sources at all other facilities, the department shall assess fees for air emission permits as follows:
- (a) Application. The initial application fee shall be one thousand dollars for each air emission permit.
- (i) Each application for an emission permit shall be accompanied by the full amount of the initial application fee.
- (ii) No application shall be processed prior to payment of the full amount specified.
- (iii) Applications for which no remittance is received shall be returned to the applicant.
- (iv) The applicant shall pay any additional actual costs involved with processing the application, and the department shall bill for these on a calendar quarter basis.
- (v) The initial application fee shall be a credit to the applicant's quarterly billings.
- (b) Operations. The department shall charge each emission source operator to cover the actual expenses the department incurs in determining compliance with the provisions of established regulations and conditions of the air emission permit.
- (i) The department shall bill the operator each calendar quarter until the permit is terminated by the department.
- (ii) The quarterly bills shall specify the manpower, laboratory, and support service costs associated with the regulatory activities conducted by the department.

(c) Amendment. The actual costs the department incurs in reviewing and processing an amendment to an air emission permit shall be added to and included in the department's calendar quarter charge for regulatory activities.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–254–160, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.98 RCW. 88–17–061 (Order 2670), § 440–44–062, filed 8/17/88.]

WAC 246-254-170 Failure by applicant or licensee to pay prescribed fees. In any case where the department finds that an applicant or a licensee has failed to pay a prescribed fee or actual costs incurred during a calendar quarter, the department will not process any application and may suspend or revoke any license or approval involved or may issue an order with respect to licensed activities as the department determines to be appropriate or necessary in order to carry out the provisions of this chapter.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–254–170, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. 87–01–031 (Order 2450), § 402–70–090, filed 12/11/86; 79–12–073 (Order 1459), § 402–70–090, filed 11/30/79, effective 1/1/80.]

WAC 246-254-999 Site use permit fee. (1) The fees for a site use permit are:

One time shipment - \$ 50.00 or (see WAC 440-44-060(2))

Site use permit continuous services

\$150.00 per year

- (2) One-time shipment: A generator having radioactive waste for disposal for one time only can obtain a site use permit for such a shipment. This permit terminates upon receipt of the shipment for disposal and cannot be reissued to a generator.
- (3) A broker who takes possession of waste from a generator and assumes responsibility for that waste must also assume responsibility for assuring the generator has a current, unencumbered site use permit.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–254–999, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.98 RCW and 1985 c 383. 85–20–021 (Order 2283), § 440–44–060, filed 9/23/85. Statutory Authority: RCW 43.20A.055. 83–12–058 (Order 1965), § 440–44–060, filed 6/1/83.]

Chapter 246–255 WAC RADIATION PROTECTION—FORMS

Reviser's note: Forms set forth within chapter 402–990 WAC were filed January 8, 1969, entitled "Instructions for preparation of application for radioactive material license," (Forms RHF-1, RHF-2, RHF-3, RHF-4, RHF-5, RHF-14-1, RHF-14-2). Chapter 402–990 WAC was recodified as chapter 246–255 by WSR 91–02–049 (Order 121), filed December 27, 1990, effective January 31, 1991. Statutory Authority: RCW 43.70.040.

STATE OF WASHINGTON



INSTRUCTIONS FOR PREPARATION OF APPLICATION FOR RADIOACTIVE MATERIAL LICENSE Forms RHF-1 and RHF-2

GENERAL INFORMATION

An applicant for a "Radioactive Material License" should complete Form RHF-1 in detail. The applicant should endeavor to cover his entire radioisotope program with one application, if possible. However, separate applications should be submitted for medical teletherapy and gamma irradiators. Supplemental sheets may be appended when necessary to provide complete information. Item 16 must be completed on all applications. Submission of an incomplete application will often result in delay in issuance of the license because of the correspondence necessary to obtain information requested on the application.

The Form RHF-2 should also be completed each time a medical request is made for a human use of radioisotopes. Two copies of the completed Form RHF 1 (and RHF-2 if a medical application) should be sent to the Washington State Department of Health, Radiation Control Agency, Smith Tower, Seattle, Washington 98104. One copy should be retained for the applicant's file.

COMPLETE EVERY ITEM - LEAVE NO BLANKS

EXPLANATION OF FORM RHF-1

Item No.

- 1 (a) The "applicant" is the organization or person legally responsible for possession and use of the radioactive material specified in the application.
 - (b) Indicate other address(es) at which radioactive material will be used if different from that listed in 1 (a). A post office box number is not acceptable.
- 2 The "department" is the department or similar subdivision where the radioactive material will be used.
- 3 Self-explanatory.
- 4 The "individual user" is the person experienced in use and safe handling of radioisotopes. If the application is for "human use," the individual user must be a physician licensed by the State of Washington to dispense drugs in the practice of medicine and have extensive experience for each proposed clinical use.
- 5 Self-explanatory.
- 6 (a) List by name each radioisotope derired, such as "Carbon 14," "Cobalt 60," etc.
 - (b) List chemical and/or physical form for each radioisotope and the quantity of each which the applicant desires to possess at any one time. If more than one

chemical or physical form of a particular radioisotope is desired, a *separate* possession limit should be stated for each form. For example, an applicant desiring to use two chemical forms of Iodine 131 must specify both forms and a possesison limit for *each* form. Example:

Iodine131Iodide10 millicuriesIodine131Iodinated Human1 millicurie

Serum Albumin

Krypton 85 Gas 1000 millicuries If the radioactive material is to be obtained as a sealed source(s), specify the manufacturer, model number, and amount of activity in *each* sealed source. Example:

Cobalt 60 3 Sealed Sources, 100 mci 300 millicuries each (Iso Corp. Model Z-54)

- 7. State the use of each radioactive material and chemical form specified in Item 6 (a) and (b). If the radioisotope is for "human use," do not complete this item; complete Form RHF-2-Supplement A—Human Use.
- 8- 9 These items must be completed for each individual named in Item 4. If more than one individual is listed in Item 4, clearly key the name of each individual to his experience.
- 10-16 Self-explanatory.

(over)

EXPLANATION OF FORM RHF-2-SUPPLEMENT A—HUMAN USE

Item No.

- 1 Self-explanatory.
- 2 Self-explanatory.
- 3 State Regulations provide that the using physician have substantial experience in the proposed use, the handling and administration of radioisotopes and, where applicable, the clinical management of radioactive patients. The physician must furnish suitable evidence of such experience with his application. Supplement A—Human Use—Page 3 is provided for conveniently presenting these details.
- 4 Name or describe each clinical use for each radioisotope and chemical form administered. List radiological protection procedures to be followed in sufficient detail to permit a realistic evaluation of the potential radiological hazards.
- 5 (a) Dosage for treatment of patients will depend upon the clinical judgment of the responsible physician; the State is only interested in the *proposed dosage range*.
- (b) For experimental programs or new and unusual uses, the maximum single dose of radiomaterial to be administered should be included and the approximate number and frequency of such doses. Rationale for unusually high dosages should be presented. The proposed use should be outlined in detail demonstrating that radiological health safety to the patient will not be jeopardized. If the use duplicates, or is based on, a use reported in the technical literature, an abstract of such a report or article and a brief statement as to how such use will be followed or modified will suffice.
- 6 Radioisotopes furnished by AEC facilities are pharmaceutically UNREFINED. An applicant should include information regarding processing or standardization procedure if radioactive material will not be obtained in precalibrated form for oral administration or precalibrated and sterilized form for parenteral administration.

- 7 Self-explanatory.
- 8 (a) Give the name and address(es) of the hospital(s) which will admit your patients that have been administered radioisotopes.
- (b) Submit a copy of the radiological protection instructions furnished to the hospital personnel regarding the care of patients to whom radioisotopes have been administered. Attach also a list of radiation instruments you will make available to the hospital.
- 9 (a), (b) To be completed by using physician.
- 10, 11, It is recommended that these items be completed by 12 the applicant physician's preceptor in the medical use of radioisotopes. The preceptoring physician is usually the chairman of the medical isotopes committee of the institution where clinical experience was acquired. However, the preceptor may be a staff physician experienced in the clinical use of radioisotopes under whom the using physician's radioisotope training and experience was acquired. If possible, the using physician's entire clinical radioisotope experience should be included. Additional comments may be presented in the space provided on page 4.

Note.—For Medical-Institutional Type Program

- 1 List the names, medical specialties, and radioisotope experience, if any, of each member of the local isotope committee.
- 2 State the procedures the local isotope committee will use to control the procurement and to approve uses of radioisotopes at the institution.
- 3 Submit a copy of instructions given to nurses who will care for patients containing radioactive material.
- 4 Submit a copy of radiological protection rules and procedures given to individuals using radioisotopes at the institution.

1-67—1M

Page 1

Washington State Department of Health APPLICATION FOR RADIOACTIVE MATERIAL LICENSE

INSTRUCTIONS—Complete Items 1 through 16 if this is an initial application. If application is for renewal of a license, complete only Items 1 through 7 and indicate new information or changes in the program as requested in Items 8 through 15. Use supplemental sheets where necessary. Item 16 must be completed on all applications. Mail two copies to: Washington State Department of Health, Radiation Control Section, Smith Tower, Seattle, Washington 98104. Upon approval of this application, the applicant will receive a State of Washington Radioactive Material License, issued in accordance with the general requirements contained in Washington State Department of Health, Radiation Control Regulations and the Washington Nuclear Energy and Radiation Control Act, Chapter 70.98 RCW.

NEW APPLICATION AMENDMENT TO LICEN	NSE RENEWAL
1. (a) NAME AND STREET ADDRESS OF APPLICANT. (Institution, firm, hospital, person, etc.)	(b) STREET ADDRESS(ES) AT WHICH RADIOACTIVE MATERIAL WILL BE USED. (If different from 1 (a).)
2. DEPARTMENT TO USE RADIOACTIVE MATERIAL.	3. PREVIOUS LICENSE NUMBER(S). (If this is an application for renewal of a license, please indicate and give number.)
4. INDIVIDUAL USER(S). (Name and title of individual(s) who will use or directly supervise use of radioactive materials. Give training and experience in Items 8 and 9.)	5. RADIATION PROTECTION OFFICER (Name of person designated as radiation protection officer if other than individual user. Attach resume of his training and experience as in Items 8 and 9).
6. (a) RADIOACTIVE MATERIAL. (Elements and mass number of each.)	(b) CHEMICAL AND/OR PHYSICAL FORM AND MAXI- MUM QUANTITY OF EACH CHEMICAL AND/OR PHYSICAL FORM THAT YOU WILL POSSESS AT ANY ONE TIME. (If sealed source(s), also state name of manufacturer, model number, number of sources and maximum activity per source.)

(over)

^{7.} DESCRIBE PURPOSE FOR WHICH RADIOACTIVE MATERIAL WILL BE USED. (If radioactive material is for "human use," Supplement A (Form RHF-2) must be completed in lieu of this item. If radioactive material is in the form of sealed sources, include the make and model number of the storage container and/or device in which the source will be stored and/or used.) Attach extra sheets if necessary.

Form RHF-1										Page Two
TRAINING	AND EXPERIENCE O	F EACH INDI	VIDU	AL NAMED II	V ITEN	I 4 (Use	supplemental	sheets if n	ecessary).	
8. TYPE (OF TRAINING			WHERE TRAINED	τ	URATION TRAINING		THE JOB le answer)	FORMA (Circle	L COURSE e answer)
	ciples and practices of	radiation					Ye	s No	Yes	No
b. Radioactivity measurement standardization and monitoring techniques and instruments							Ye	. No	Yes	No
c. Matl	hematics and calculation and measurement of ra	s basic to the		1			Ye	s No	Yes	No
d. Biole	ogical effects of radiation	on		·			Ye	s No	Yes	No
9. EXPER	IENCE WITH RADIAT	TION (Actual t	ise of	radioisotopes	or equ	ivalent ex	perience).			
ISOTOPE	MAXIMUM AMOUNT	WHERE EX	PERI	ENCE WAS GAIN	NED	DURATI	ON OF EXPER	IENCE	TYPE	OF USE
								- 		
10. RADIA	TION DETECTION INS	STRUMENTS (Use s	supplemental sl	heets if	f necessary	7).			
(Include mal	E OF INSTRUMENTS	ach) NUMB AVAILA	BER ABLE	RADIATION DETECTED	SENS RANG	SITIVITY E (mr/hr)	WINDOW THICKNESS (mg/cm²)	u Sur	SE (Monito veying, Me	oring, asuring)
11. METHO	DD, FREQUENCY, AND	STANDARDS	USE	D IN CALIBR	ATINO	INSTRU	MENTS LIST	ED ABOV	E.	
	BADGES, DOSIMETER occasing, or name of sup		ASSA	Y PROCEDUR	ES US	ED (For	film badges,	specify me	thod of c	ealibrating
	INFO	RMATION 1	го в	E SUBMITT	ED O	N ADDI	TIONAL SI	IEETS		
13. FACILI fume he	TIES AND EQUIPMEN oods, etc. Explanatory	IT. Describe la sketch of facili	borat	ory facilities a attached (Circ	nd rem	ote handli wer).	ng equipmen Yes No		ontainers,	shielding,
covers	TION PROTECTION Proceeds to and arrangements for	eak testing pro	cedur	es where appli	cable,	name, trai	ining, and ex	perience of	person t	pplication o perform
15. WASTE descript involved	DISPOSAL. If a committee in the committe	nercial waste di rill be used for o	isposa dispos	l service is em sing of radioact	ployed, ive wa	specify na stes and e	ame of compa stimates of th	ny. Otherw e type and	vise, subm amount	it detailed of activity
115377531	PPLICANT AND ANY M 1, CERTIFY THAT TMENT OF HEALT N, INCLUDING ANY S LEDGE AND BELIEF.	OFFICIAL EX T THIS APPL RADIATION	ECUT	CERTIFICA must be completed FING THIS CE TION IS PRES TROL REGUL FACHED HER	ted by a ERTIFI PARED ATION	CATE ON IN CON	BEHALF O FORMITY V FHAT ALL AND CORRE	F THE AP VITH WAS NFORMAT CT TO TH	PLICANT HINGTOI FION COI HE BEST	NAMED N STATE NTAINED OF OUR
				•••••	••••••		Applicant nam	ed in Item I	i	**************
Date				Ву:		***************************************	•••••••••••		•••••	
				T i	tle of c	ertifying off	icial authorized	to act on be	ehalf of the	applicant

Page 1

Washington State Department of Health APPLICATION FOR RADIOACTIVE MATERIAL LICENSE

Supplement A—Human Use

	radioactive material is for "human use" (internal administration of radioactive material or the radiation ther eings), complete this supplement and attach to the application for radioactive material license.	refrom t	o human
1.	(a) USING PHYSICIAN'S NAME (b) NAME AND ADDRESS OF APPLICANT (If di	fferent fi	rom 1 (a
2.	THE USING PHYSICIAN INDICATED ABOVE IS LICENSED TO DISPENSE DRUGS IN THE PRACTICE	1	T
	OF MEDICINE BY THE STATE OF WASHINGTON. Circle Answer	YES	ИО
3.	A STATEMENT OF USING PHYSICIAN'S CLINICAL RADIOISOTOPE EXPERIENCE (PAGE 3 OF THIS SUPPLEMENT) IS SUBMITTED IN SUPPORT OF THIS APPLICATION. IF ANSWER IS NO, USE PAGE 2 OF THIS SUPPLEMENT TO EXPLAIN OR REFER TO OTHER APPLICATION OR RELATED DOCUMENTS ON WHICH THIS INFORMATION APPEARS. Circle Answer	YES	NO
	PROPOSED DIAGNOSIS OR TREATMENT		
4.	(a) DESCRIBE PURPOSE FOR WHICH RADIOACTIVE MATERIAL WILL BE USED INCLUDING SPECIFI OR DISEASES TO BE DIAGNOSED OR TREATED (Use page 2 if necessary):	C COND	ITIONS
	(b) CHEMICAL FORM ADMINISTERED:		•
	(c) DESCRIBE PROCEDURES WHICH WILL BE OBSERVED TO MINIMIZE HAZARD FROM HANDLING, S DISPOSAL OF THE RADIOACTIVE MATERIAL:	STORAG	E, AND
	(d) DESCRIPTION AND SKETCHES OF SPECIAL DEVICES TO BE USED FOR ADMINISTERING MATERIAL TO HUMAN BEINGS ARE:	RADIOA	ACTIVE
	(1) ATTACHED (Literature References Will Suffice). Circle Answer	YES	NO
	(2) ON FILE WITH WASHINGTON STATE DEPARTMENT OF HEALTH. REFER TO SPECIFIC DOCUMENT NO. Circle Answer	YES	NO
5.	PROPOSED DOSAGE SCHEDULE		
	(a) In millicuries for internally administered radioactive material other than discrete fixed sources; and in reas appropriate, for internal or external irradiation from discrete fixed sources (gold seeds, cobalt nee separately for each condition or disease (use page 2 if necessary):	-	,
	(b) INVESTIGATIVE PROPOSAL FOR EXPERIMENTAL, NEW OR UNUSUAL HUMAN USES IS ATTACHI should include outline of conditions to be evaluated, including data from animal studies and/or abstract of	ED. (Att	achment
	literature reference if any, number and type of patients (i.e., age group, moribund, etc.)). Circle Answer	YES	NO
6.	IF RADIOACTIVE MATERIAL WILL NOT BE OBTAINED IN PRECALIBRATED FORM FOR ORAL AD OR IN PRECALIBRATED AND STERILIZED FORM FOR PARENTERAL ADMINISTRATION, DESCRIBE ID PROCESSING, AND STANDARDIZATION PROCEDURES:		
7.	THE PROPOSED USE OF RADIOACTIVE MATERIAL HAS BEEN, OR WILL BE, APPROVED BY THE MEDICAL ISOTOPE COMMITTEE. Circle Answer	YES	МО
-	HOSPITAL FACILITIES FOR INDIVIDUAL PRACTICE USE ONLY		***
8.	(a) THE APPLICANT HAS COMPLETED ARRANGEMENTS FOR A HOSPITAL TO ADMIT RADIOACTIVE PATIENTS WHENEVER ADVISABLE. Circle Answer	YES	NO
	(b) A COPY OF INSTRUCTIONS TO BE FURNISHED TO THE HOSPITAL AS TO RADIOLOGICAL SAFETY PRECAUTIONS TO BE TAKEN AND AVAILABLE RADIATION INSTRUMENTATION IS ATTACHED. Circle Answer	YES	МО

(over)

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Washington State Department of Health APPLICATION FOR RADIOACTIVE MATERIAL LICENSE

Supplement A-Human Use (cont.)

This page may be completed by the physician's preceptor (if any) in the medical use of radioisotopes. When the information is not furnished by the preceptor, the name and present address of the preceptor (if any) should be shown in Item 12 below.

furnished by the preceptor, the name and present address of the preceptor (if any) should be shown in Item 12 below.

9. (a) USING PHYSICIAN'S NAME

(b) NAME AND ADDRESS OF APPLICANT (if different from 9 (a))

10. CLINICAL TRAINING AND EXPERIENCE OF PHYSICIAN WHO WILL USE RADIOACTIVE MATERIAL (A) ISOTOPE TYPE OF PARTICIPATION FOR ALL CASES IN COLUMN D (Circle applicable numbers of items in accordance with key set forth below) NUMBER OF CASES CONDITION(S) DIAGNOSED OR TREATED I-131 Diagnosis of thyroid function Treatment of hyperthyroidism Treatment of thyroid cancer Treatment of cardiac conditions Brain tumor localization Blood determinations Others: P-32 Treatment of polycythemia and leukemia Soluble Brain tumor localization Treatment of bone metastases Others: P-32 Treatment of prostatic cancer CrPO. Treatment of cervical cancer Treatment of pleural effusions and/or ascites Others: Au-198 Treatment of prostatic cancer Colloid Treatment of cervical cancer Treatment of pleural effusions and/or ascites Others: Cr-51 Blood determinations Others: Other Radium 226 Isotopes

Key to above numbers (column D)

Active Participation and Discussion

- 1. Examination of patients to determine suitability for radioisotope diagnosis and/or treatment and recommendations on dosage to be prescribed.
- 2. Collaboration in calibration and administration of dosages including related measurements and plotting of data.
- Active period of training and experience of sufficient duration to permit followup of patients through treatment and
 posttreatment period including reevaluation as to effectiveness and complications.
- 4. Study and discussion of case histories to establish most efficacious diagnostic and/or therapeutic techniques for this radioisotope use.

	-										
11.	TOTAL NUMBER OF	HOURS OF PA	RTICIPATION	IN CLINIC	AL TRAIN	IING		hours.			
12.	THE TRAINING AND	EXPERIENCE II	NDICATED AE	SOVE WAS	DBTAINED	UNDER	THE S	SUPERVISION	OR (GUIDANC	E OF
	(Name of physician		, AT	(Institut	ion)			(Signature o	f prec	eptor)	••••••

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Washington State Department of Health APPLICATION FOR RADIOACTIVE MATERIAL LICENSE Supplement A—Human Use (cont.)

This page may be used for providing additional information. Please cross reference specific items.

[Title 246 WAC-p 227]

STATE OF WASHINGTON

NOTICE TO EMPLOYEES

STANDARDS FOR PROTECTION AGAINST RADIATION



In the Radiation Control Regulations, the Department of Health Has Established Standards for Your Protection Against Radiation Hazards.

YOUR EMPLOYER'S RESPONSIBILITY

Your employer is required to:

- 1. Apply these regulations to work involving sources of radiation.
- 2. Post or otherwise make available to you a copy of the Department of Health regulations, licenses, and operating procedures which apply to work you are engaged in, and explain their provisions to you.

YOUR RESPONSIBILITY AS A WORKER

You should familiarize yourself with those provisions of the Department of Health regulations, and the operating procedures which apply to the work you are engaged in. You should observe their provisions for your own protection and protection of your co-workers.

WHAT IS COVERED BY THESE REGULATIONS

- 1. Limits on exposure to radiation and radioactive material in controlled and uncontrolled areas;
- 2. Measures to be taken after accidental exposure;
- 3. Personnel monitoring, surveys and equipment;
- 4. Caution signs, labels, and safety interlock equipment;
- 5. Exposure records and reports; and
- 6. Related matters.

REPORTS ON YOUR RADIATION EXPOSURE HISTORY

- The Department of Health regulations require that your employer give you a written report if you receive an exposure in excess of any applicable limit as set forth in the regulations or in the license. The basic limits for exposure to employees are set forth in RH 4.2*and RH 4.3*of the regulations. These sections specify limits on exposure to radiation and exposure to concentrations of radioactive material in air or water. *Now codified As WAC 402-24-020 and WAC 402-24-030. If you work where personnel monitoring is required,
- and if you request information on your radiation exposures.
 - (a) Your employer must give you a written report, upon termination of your employment, of your radiation exposures, and
 - (b) Your employer must advise you annually of your exposure to radiation.

INSPECTIONS

All licensed or registered activities are subject to inspection by the Department of Health or its duly authorized representatives.

INQUIRIES

Inquiries dealing with the matters outlined above can be sent to the Department of Health, Radiation Control Agency, 1510 Smith Tower, Seattle, Washington 98104.

POSTING REQUIREMENT

Copies of this notice must be posted in a sufficient number of places where employees are employed in activities licensed or registered pursuant to parts II and III, by the Department of Health, to permit employees working in or frequenting any portion of a controlled area to observe a copy on the way to or from such area.

1-67-6M

STATE OF WASHINGTON OCCUPATIONAL EXTERNAL RADIATION EXPOSURE HISTORY IDENTIFICATION

1.	NAME (Print—Last, first and middle)			2. SOCIAL SE	CURITY No.
3.	DATE OF BIRTH (Month, day, year)			4. AGE IN FU	ULL YEARS (N)
	OC	CUPATIONAL DOSE—	PREVIOUS HI	STORY	
8	PREVIOUS EMPLOYMENT INVOLVING RADIATION EXPOSURE— List Name and Address of Employer	6. EMPLOYMENT PERIOD (From—to)	7. EXPOSURE PE		EVIOUS DOSE HISTORY BODY 9. INSERT ONE; Record or Calculated
•					
10.	REMARKS	11. ACCUMULATED OCCUTOTAL	CUPATIONAL DO	OSE	
12.	CALCULATIONS—Permissible Accumu Whole Body:	lated Occupational Dose	13. CERTIFICA in Columns to my knowledge	TION: I certify 5, 6, and 7 is cor	that the exposure history listed rect and complete to the best of
	(A) Permissible Accumulated Occupational Do (B) Total Accumulated Occupational Dose (Fr	· ·	Employee's Sig	·	Date
	(C) Permissible Occupational Dose on Reserve.	REM			

FOR INSTRUCTIONS—SEE OVER

14. Name and Address of Licensce or Registrant,

Page 2

INSTRUCTIONS FOR PREPARATION OF FORM RHF-4

This form or a clear and legible record containing all the information required on this form must be completed by each licensee or registrant for each individual whom he proposes to expose to radiation dose in excess of 1.25 rem/calendar quarter.

Identification

- Item 1. Self-explanatory.
- Item 2. Self-explanatory except that, if individual has no social security number, the word "none" shall be inserted.
- Item 3. Self-explanatory.
- Item 4. Enter the age in full years. This is called "N" when used in calculating the permissible accumulated occupational dose. "N" is the age in years of the individual at his last birthday.

Occupational Doso

- Item 5. List the name and address of each previous employer where occupational exposure to radiation was received. For periods of self-employment, insert the word "self-employed." Start with the most recent employer and work back.
- Item 6. Give the dates of employment,
- Item 7. List periods during which occupational exposure to radiation occurred.
- Item 8. List the dose recorded for each period of exposure from records of previous occupational exposure of the individual as calculated.

Dose to the whole body shall be deemed to include any dose to the whole body, gonads, active blood-forming organs, head and trunk, or lens of eye.

In any case where a licensee or registrant is unable to obtain a report of the individual's occupational exposure for periods when such individual was exposed to radiation it shall be assumed that such individual has received an exposure to the following occupational dose:

- If prior to January 1, 1961
 3.75 rem/calendar quarter; or ¹
- If after January 1, 1961
 1.25 rem/calendar quarter.

Calculated Dose

- Item 9. After each entry in Item 8 indicate in Item 9 whether dose is obtained from records or calculated.
- Item 10. Self-explanatory.

Total Accumulated Occupational Dose

Item 11. The total for the whole body is obtained by summation of all values in Item 8.

Calculations 1

Item 12. The lifetime accumulated occupational dose for each individual and the permissible occupational dose in reserve are obtained by carrying out the following steps: The value for "N" should be taken from Item 4. Subtract 18 from "N" and multiply the difference by 5 rem (For example, John Smith, is age 32; N = 32, 5(32 — 18) = 70 rem.) and enter under (A). Enter total exposure to date from Item 11 opposite (B). Subtract (B) from (A) and enter the difference opposite (C). The value in (C) represents the dose to the whole body to which that individual can be exposed as long as the dose in any calendar quarter does not exceed 3 rems. This value for permissible occupational dose on reserve is to be carried forward to Form RHF-5, Item 6.

Certification

- Item 13. Upon completion of the report, the employee must certify that the information in Columns 5, 6, and 7 is accurate and complete to the best of his knowledge. The date is the date of his signature.
- Item 14. Self-explanatory.

^{1.} If calculation of the individual's total accumulated occupational dose for all periods prior to January 1, 1961, under Item 8 yields a result higher than 5(N-18) for the individual as of that date; the excess may be disregarded. For this calculation, N should be the individual's age in years at his last birthday prior to January 1, 1961.

STATE OF WASHINGTON

CURRENT OCCUPATIONAL EXTERNAL RADIATION EXPOSURE IDENTIFICATION

1.	NAME (Print—Last, firs	t and middle	e)				2	SOCIA	L SECUR	ITY N	0.	_
3.	DATE OF BIRTH (Mo	nth, day, ye	ar)				4	. AGE I	N FULL	YEARS	(N)	
			(CCUI	PATIONAL	DOSI	<u> </u>					
5.	DOSE RECORDED FOI whole body; or hands a	R: Specify and forearn	whole body; skir ns, feet and ank	of 6.	Permissible reserve at covered by	beginn	ing of p	eriod 7.	(e. g.,	Film F r—PC;	Calculatio BET	B; Pocket ns—Calc.)
8	PERIOD OF EXPOSUR	E.	1	DO	SE FOR TH	E PER	IOD (ren	n)			Running	total for
<u></u>	(From—to)		9. X or GAMN		10. BETA	1	NEUTRO		TOTAL	_ _	calendar (rem)	quarter
			* IDETA (HIMILIT A TOP		NEW /DE	D.A.)				
			LIFETIME	ACC	UMULATE	D DC	SE (RE	M)				
14.	Previous Total	15. Total	Dose This Sheet	16. T	otal Accum, C Pose	ccup.	17. Per Do	m. Acc. Oo se 5(N-18	ecup.) Rem	18. Po	erm. Occuj 1 Res.	o. Dose

19. Name and Address of Licensee or Registrant,

FOR INSTRUCTIONS—SEE BACK

Page 2

INSTRUCTIONS FOR PREPARATION OF FORM RHF-5

The preparation and safekeeping of this form or a clear and legible record containing all the information required on this form is required, as a current record of occupational external radiation exposures for each individual for whom personnel monitoring is required. Note that a separate copy of this form is to be used when recording external exposure to the whole body; skin of the whole body; or hands and forearms and feet and ankles,

Listed below by item are instructions and additional information directly pertinent to completing this form.

Identification

- Item 1. Self-explanatory.
- Self-explanatory except that, if individual has no social security number, the word "none" shall be inserted.
- Item 3. Self-explanatory.
- Item 4. Enter the age in full years. This is called "N" when used in calculating the permissible accumulated occupational dose. "N" is the age in years of the individual at his last birthday.

Occupational Dose

Item 5. Separate form must be used when recording exposure to whole body; skin of whole body; hands and forearms, feet and ankles—Specify which exposure is being recorded in Item 5.

If an individual receives an occupational dose to the skin of the whole body from radiation of half-value layer less than 5 cm. of soft tissue, the dose to the skin of the whole body should be recorded on a separate form, unless the dose to the skin of the whole body as indicated by personnel monitoring devices has been included as dose to the whole body on a form maintained for recording whole body exposures.

If an individual receives a radiation dose to the hands and forearms, or feet and ankles, the dose to those portions of the body should be recorded on separate forms unless the dose to those parts of the body as indicated by personnel monitoring devices have been included as doses to the whole body on a form maintained for recording whole body exposure.

Dose to the whole body shall be deemed to include any dose to the whole body, gonads, active blood-forming organs, head and trunk, or lens of eye.

- Item 6. The permissible occupational dose on reserve is taken from previous records of exposure recorded by the licensee or registrant (i. e., Item 18 of a previous Form RHF-5; or Item 12 of Form RHF-4 if the individual's exposure during the employment with the licensee or registrant begins with this record).
- Item 7. Indicate the method used for monitoring the individual's exposure to each type of radiation to which he is ex-
- Now codified as WAC 402-16-060(3) **Now codified as WAC 402-24-020(1)

- posed in the course of his duties. Abbreviations may be used.
- Item 8. The period of exposure should specify the day the measurement of that exposure was initiated and the day on which it was terminated. For example, a film badge issued Monday morning, August 4, 1958, and picked up Friday, August 15, 1958, would be indicated 8/4/58—8/15/58.
- Items 9, Self-explanatory. The values are to be given in rem. 10 and 11.

 All measurements are to be interpreted in the best method known and in accordance with 1.6.3.*Where calculations are made to determine dose, a copy of such calculations is to be maintained in conjunction with this record. In any case where the dose for a calendar quarter is less than 10% of the value specified in 4.2.1, the phrase "less than 10%" may be entered in lieu of a numerical value.
- Item 12. Add the values under Items 9, 10 and 11 for each period of exposure and record the total. In calculating the "Total" any entry "less than 10%" may be disregarded.
- Item 13. The running total is to be maintained on the basis of calendar quarters.

Lifetime Accumulated Dose (Whole Body)

Note: If the licensee chooses to keep the individual's exposure below that permitted in 4.2.1, Items 14 through 18 need not be completed. However, in that case the total whole body dose for each calendar quarter recorded in Item 13 should not exceed 1.25 rem.

If an individual is exposed under the provisions of 4.2.2, complete Items 14 through 18 at the end of each calendar quarter and when the sheet is filled. Values in Item 13, when in the middle of a calendar quarter, and values in Item 18, must be brought forward to next sheet for each individual.

- Item 14. Enter the previous total accumulated dose from previous dose records for the individual (e. g., Item 16 if Form RHF-5 or Item 11 if Form RHF-4).
- Item 15. Enter the sum of all totals under Item 12.
- Item 16. Add Item 14 and Item 15 and enter that sum.
- Item 17. Obtain the permissible accumulated occupational dose in rem for the whole body. Use the value for "N" from Item 4. Subtract 18 from "N" and multiply the difference by 5 rem (e. g., John Smith, age 32; 5(32 18) = 70 rem).
- Item 18. Determine the permissible occupational dose on reserve by subtracting Item 16 from Item 17. The permissible occupational dose on reserve is that portion of the permissible lifetime accumulated dose for the individual remaining at the end of the period covered by this sheet,
- Item 19. Self-explanatory.

RHF-14-1



STATE OF WASHINGTON

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RADIOACTIVE MATERIALS LICENSE

Pursuant to the Nuclear Energy and Radiation Control Act, RCW 70.98, and the Radiation Control Regulations, Part III,* and in reliance on statements and representations heretofore made by the licenseed designated below, a license is hereby issued authorizing such licensee to transfer, receive, possess and use the radioactive material(s) designated below; and to use such radioactive materials for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules, regulations, and orders now or hereafter in effect of the State Department of Health and to any conditions specified below.

* Now Codified as Chapter 402-20 WAC.

Licensee	3. License number						
Name	4. Expiration date						
Address	5. Reference number	5. Reference number					
6. Radioactive materials (element and mass number)	7. Chemical and/or physical form	8. Maximum quantity licensee may possess at any one time					
Authorized use. (Unless otherwise specified,	CONDITIONS , the authorized place of use is the licensee's addre	ess stated in Item 2 above.)					

(1990 Ed.)

Title 246 WAC: Department of Health

RHF-14-2



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RADIOACTI	VE MATERIALS I	LICENSE	
		License Num	ber
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[Title 246 WAC-p 234]

FOR THE STATE DEPARTMENT OF HEALTH

Chapter 246–260 WAC WATER RECREATION FACILITIES

WAC	
246-260-001	Purpose and authority.
246-260-010	Definitions.
246-260-020	General administration.
246-260-030	Construction permit.
246-260-040	Operating permit.
246-260-050	Compliance.
246-260-060	Surveillance.
246-260-070	Water quality standards, analysis, and sample
	collection.
246-260-080	Monitoring, reporting, and record keeping.
246-260-090	Swimming pool design, construction, and equipment.
246-260-100	Operation of swimming pool facilities.
246-260-110	Spa pool general design, construction, and equipment.
246-260-120	Operation—Spa pools.
246-260-130	Wading pools.
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246-260-150	Spray pools.
246-260-160	Operation—Spray pools.
246-260-170	Water recreation facility pools not in operation.
246–260–180	Bathing beaches.
246-260-200	Water recreation industry requirements.
246–260–210	Technical advisory committee.
246-260-220	Restrictions on animals.
246–260–230	Variance.
246-260-240	Substitution.
246–260–250	Enforcement.
246-260-260	Hearings.
246–260–990	Fees.

WAC 246-260-001 Purpose and authority. The purpose of this chapter is to protect the health, safety, and welfare of users of water recreation facilities (WRF). This chapter is established per RCW 70.90.120.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–003, filed 3/12/90, effective 4/12/90.]

WAC 246-260-010 Definitions. (1) "Abbreviations" (technical):

- (a) "DE" means diatomaceous earth;
- (b) "fps" means feet per second;

246-260-998 Severability.

- (c) "gpm" means gallons per minute;
- (d) "mg/l" means milligrams per liter. When requirements in this regulation specify limits for liquid volume measurements using mg/l or ppm, either may be used depending on the type of testing equipment available;
- (e) "ppm" means parts per million. See notation under mg/l for use;
- (f) "TU" means turbidity unit as measured by the nephelometric method.
- (2) "ANSI" means American National Standards Institute.
- (3) "APHA" means American Public Health Association.
- (4) "Approved" means the department or local health officer has stated in writing that the design plans and specifications are in accordance with chapter 248-98 WAC.
 - (5) "ARC" means American Red Cross.
- (6) "Architect" means a registered architect currently licensed under chapter 18.08 RCW in Washington state.

- (7) "ASHRAE" means American Society of Heating, Refrigeration and Air Conditioning Engineers.
- (8) "Assistant lifeguard" means a person appointed by the owner or manager meeting the training requirements of this chapter actively assisting lifeguards (under direct lifeguard supervision) for the purpose of ensuring bather safety.
- (9) "Attendant" means a person appointed by the owner or manager meeting the training requirements of this chapter, monitoring activities and conditions for the purpose of ensuring bather safety.
- (10) "Bathing beach" means a bathing place, together with buildings and appurtenances used in connection therewith, on a natural pond, lake, stream, or other body of fresh or salt water, which is open to the public for bathing by express permission of the owner, or which is operated for a fee, or openly advertised as a place for bathing by the public.
 - (11) "Board" means the state board of health.
- (12) "CNCA" means Council for National Cooperation in Aquatics.
- (13) "CPSC" means Consumer Product Safety Commission (U.S.).
- (14) "Communication system" means any combination of devices permitting the passage of or exchange of messages between personnel and/or personnel and bathers. Systems can include but are not limited to two-way radios, hard wired intercoms, horns, whistles, hand signals, direct voice, signs, or equivalent.
- (15) "Contaminant" means any physical, chemical, or biological substance present in the WRF water which may adversely affect the health or safety of the bather and/or the quality of the water.
- (16) "Cross-connection" means any physical arrangement connecting a:
- (a) Potable water system directly or indirectly, with anything other than another potable water system; or
- (b) WRF pool to any potable or nonpotable water source capable of contaminating either the WRF pool, its components, or potable water source as a result of backflow.
 - (17) "Department" means the department of health.
- (18) "Diving envelope" means the minimum dimensions of an area within the pool necessary to provide entry from a diving board, platform, or pool decking intended for users to dive.
- (19) "Engineer" means a registered professional engineer currently licensed under chapter 18.43 RCW in Washington state.
- (20) "FINA" means Federation Internationale de Natation Amateur.
- (21) "General use pool" means any swimming, spa, wading, or spray pool regulated by this chapter not meeting the definition of a "limited use pool." If limited—use pools provide organized programs (as noted in limited use definition), the limited use pools shall conform with the general—use pool requirements during periods of such activity.
- (22) "Handhold" means a structure not over twelve inches above the water line around the perimeter of the

pool wall, affording physical means for the bather to grasp the pool sides.

- (23) "Illness or injury report" means the written record of all facts regarding an injury or illness associated with the WRF.
- (24) "Lifeguard" means a person appointed by the owner or manager to maintain surveillance over the bathers on the deck or in the pool and to supervise bather safety. The lifeguard shall meet the training requirements of this chapter.
- (25) "Lifeguard station" means designated work station of a lifeguard.
- (26) "Lifesaving equipment" means emergency equipment and barrier protection.
- (27) "Limited use pool" means any swimming, spa, wading, or spray pool regulated by this chapter at an apartment, boarding home, condominium, home owners association, hotel, mobile home park, motel, recreational vehicle park, or rental housing unit and is for the use of the persons living or residing at these facilities and the resident's invited guests. If such pool provides organized programs at the facility (that is, formal instructional lessons for swimming or diving, swim meets, exercise classes, or other activities planned for users besides those specified under the limited use pool category), the pool facility shall conform with the general use pool requirements during periods of such activity.
- (28) "Local health officer" means the health officer of the city, county, or city-county department or district or a representative authorized by the local health officer.
 - (29) "NSF" means National Sanitation Foundation.
 - (30) "NSPI" means National Spa and Pool Institute.
- (31) "Operations" means all aspects of a WRF which must be controlled to make the facility safe, healthy, and usable for the purpose intended.
- (32) "Owner" means a person owning and responsible for a WRF or authorized agent.
- (33) "Person" means an individual, firm, partnership, copartnership, corporation, company, association, club, government entity, or organization of any kind.
- (34) "Pool" means swimming pool, wading pool, spray pool, or spa pool or the like.
- (35) "Plummet" means a line perpendicular to water surface and extending vertically to a point located at the front end of the diving board and at the center line directly in front of the diving board.
- (36) "Primary zone of visual coverage" means the area assigned to a lifeguard or attendant for primary visual surveillance of user activity.
- (37) "Radius of curvature" means the radius arc denoting the curved surface from the point of departure from the springline (vertical sidewall) of the pool to the pool bottom.
- (38) "Response time" means time between bather distress and initiation of rescue assistance contact by a lifeguard in facilities providing lifeguards.
- (39) "Recreational water contact facility" means an artificial water associated facility with design and operational features that provide patron recreational activity

- which is different from that associated with a conventional swimming pool and purposefully involves immersion of the body partially or totally in the water, and that includes but is not limited to water slides, wave pools, and water lagoons. These facilities are regulated by chapter 248–97 WAC.
- (40) "RLSSC" means the Royal Life Saving Society of Canada.
- (41) "Secretary" means the secretary of the department of health.
 - (42) "Serious injury" means any injury:
- (a) Requiring emergency service response where a person requires medical treatment as determined by the emergency medical response personnel; and/or
- (b) Resulting in a person seeking medical attention at a hospital emergency room or admittance to a hospital.
- (43) "Spa pool" means a pool designed for relaxation or recreational use where the user is sitting, reclining, or at rest and the pool is not drained, cleaned, or refilled for each user. The spa pool may include, but not be limited to, hydrojet circulation, hot water, cold water, mineral baths, air induction bubbles in any combination.
- (44) "Spray pool" means a pool or artificially constructed depression for use by bathers in which water is sprayed, but is not allowed to pond, in the bottom of the pool.
- (45) "Springline" means the point where the pool wall breaks from vertical and begins its arc in the radius of curvature (for cove construction) to the bottom of the pool.
- (46) "Swimming pool" means any structure, basin, chamber, or tank containing an artificial body of water for swimming, diving, relaxation, or recreational bathing and having a depth of two feet or more at any point and including all associated facilities.
- (47) "Turnover time" means the minimum time necessary to circulate the entire volume of the pool facility through the treatment system.
- (48) "Wading pool" means any artificial pool of water equal to or less than two feet deep and intended for wading purposes.
- (49) "Walking surface" means any surface used as a direct access surface for a pool area and the walking surface's change room facilities where the user is bare foot.
- (50) "Water treatment operator" means the appointed person operating the physical and mechanical equipment and performing related water quality monitoring and associated record keeping for proper operation of the physical facility.
- (51) "Water recreation facility (WRF)" means any artificial basin or other structure containing water used or intended to be used for recreation, bathing, relaxation or swimming, where body contact with the water occurs or is intended to occur and includes auxiliary buildings and appurtenances. The term includes, but is not limited to:
- (a) Conventional swimming pools, wading pools, and spray pools;

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- (b) Recreational water contact facilities as defined under RCW 70.90.110 and regulated under chapter 248-97 WAC;
- (c) Spa pools and tubs using hot water, cold water, mineral water, air induction, or hydrojets; and
- (d) Any area designated for swimming in natural waters with artificial boundaries within the waters.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-260-010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90-07-010 (Order 042), § 248-98-001, filed 3/12/90, effective 4/12/90; Regulation .98.001, effective 3/11/60.]

- WAC 246-260-020 General administration. (1) The department and local health officer for each local health jurisdiction shall develop an interagency agreement listing the responsibilities of each agency for administering these rules. The agreement shall designate the person responsible for:
- (a) Issuance of construction permits with plan review and review of completed facilities;
- (b) Issuance of operation permits and routine surveillance of facilities; and
 - (c) Enforcement actions.
- (2) Fees may be charged as authorized in RCW 70.90.150.
- (3) The interagency agreement shall be reviewed periodically to ensure effective use of local and state resources.
- (4) The department shall conduct a local health jurisdiction program review a minimum of once every five years to ensure conformance with state board of health standards.
- (5) The department shall review this chapter for changes at least once every five years.

[Statutory Authority: RCW 43.20,050. 91–02–051 (Order 124B), recodified as § 246–260–020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–005, filed 3/12/90, effective 4/12/90.]

- WAC 246-260-030 Construction permit. (1) Persons planning to construct, alter, or modify a WRF pool, except for routine maintenance, shall submit plans to the department or local health officer as required for review and approval:
- (a) A completed construction permit application form obtained from the department or local health officer;
- (b) Three sets of plans and specifications prepared and signed by an engineer or architect.
- (2) The architect or engineer shall provide the following information for plan review approval and project completion:
- (a) Plans drawn to scale and in sufficient detail to completely illustrate construction including, but not limited to:
 - (i) One plan view;
- (ii) One or more cross sections through the main drain:
- (iii) Overall plan showing the pool in relation to other facilities in the area;
- (iv) Detailed view of the equipment layout and the associated room or location;

- (v) A piping schematic showing piping configuration, pipe size, valves, inlets, main drains, overflow outlets, make-up water, and backwash from filter;
- (vi) Dimensional drawings of pool bottom and sidewalls;
 - (vii) Specifications of all required components;
 - (viii) Such other department-required information.
- (b) Engineers or architects may submit standard plans for prefabricated structures or structures virtually identical from one installation to the next. When the engineer or architect submits such standard drawings, future submittals, involving the standard equipment shall:
 - (i) Include copies of the approved standard drawings;
- (ii) Include an engineer or architect cover letter noting the location and address of the new facility;
- (iii) Be substantially in conformance with the original standard plan;
- (iv) Provide information on changes and note any specification differences; and
- (v) Be valid only during the period regulations or department policies concerning plan review and design standards are not changed. If errors are determined at a later period, it will be necessary to resubmit.
- (c) The facility construction report noted under subsection (5)(a) of this section. On pools:
- (i) Less than fifteen hundred square feet, the construction report shall confirm the:
- (A) Mechanical equipment and circulation system is installed and functioning substantially in accordance with the approved plans; and
- (B) Facility with provisions for diving substantially conforms with the diving envelope requirements established in the regulation.
- (ii) Fifteen hundred square feet or more, shall confirm:
- (A) Subitems under subsection (2)(c)(i) of this section; and
- (B) Walking surfaces, barriers, pool components including piping, inlets, outlets, dimensional design, pool appurtenances, equipment rooms, ventilation, and lighting and plumbing fixtures are substantially in conformance with the approved plans.
- (3) Following review of the completed permit application and plans and specifications, the department or local health officer shall forward:
- (a) Written approval or rejection or note modifications, additional information needed or conditions, and issue or deny a construction permit within thirty days of a complete submittal;
 - (b) A copy of approved plans to the designer; and
- (c) A copy of the approval letter to the department or local health officer and local building department.
- (4) The owner shall ensure any construction, modification, or alteration is completed according to approved plans and specifications.
- (5) Upon completion of WRF pool facility construction, modification, or alteration and before use, owners shall:
- (a) Submit to the department or local health officer a construction report signed by an engineer or architect certifying construction is substantially in compliance

with approved plans and specifications and related to conditions under subsection (2)(c) of this section;

- (b) Notify the department or local health officer at least five working days before intended use of the facility; and
- (c) Before use of a new or modified pool facility, obtain a valid operating permit from the state or local health jurisdiction having authority for surveillance of the pool.
- (6) The construction permit issued by the department or local health officer shall be valid for a period of eighteen months. Renewals of construction permits may be granted by the department or local health officer for a period of one year. The owner is responsible to resubmit for a reapplication for a construction permit.
- (7) WRF pool owners shall comply and obtain approval with all other applicable agency codes and standards. The agency codes and standards include, but are not limited to:
- (a) The National Electrical Code, chapter 19.28 RCW and chapter 296-46 WAC determined under the electrical section of the Washington state department of labor and industries or local electrical authority;
- (b) Local gas piping and appliance codes, American Gas Association standards, and certification meeting the latest ANSI Z21.56 or other applicable and equivalent standards;
- (c) Local building authority standards, including structural design of components;
 - (d) State and local plumbing authority standards;
- (e) Washington state department of labor and industries requirements for pressure vessels under chapter 70-.79 RCW and chapter 296-104 WAC; and
- (f) Codes designated under chapter 70.92 RCW for handicapped accessibility.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–010, filed 3/12/90, effective 4/12/90; Regulation .98.010, effective 3/11/60.]

- WAC 246-260-040 Operating permit. (1) No person shall operate a water recreation pool facility without a current department or local health officer-issued operating permit.
- (2) To obtain an operating permit, owners of a water recreation pool facility shall provide department or local health officer information showing the WRF is in compliance with this chapter.
 - (3) Operating permits shall be:
 - (a) Valid for one year;
 - (b) Subject to annual renewal; and
- (c) Nontransferable without written department or local health officer consent. For purposes of this section, a change in management of a corporation, partnership, association, or other nonindividual business entity shall create a new person requiring either consent to a permit transfer or issuance of a new permit upon proper application.
- (4) The department or local health officer issuing the operating permit may revoke or suspend the permit if

the WRF is not operated in accordance with chapter 70.90 RCW or chapter 248-98 WAC.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–015, filed 3/12/90, effective 4/12/90.]

- WAC 246-260-050 Compliance. (1) Existing water recreation facilities which do not fully comply with the design, construction, and equipment requirements in WAC 248-98-040, 248-98-050, 248-98-080, and 248-98-090 may be continued in use.
- (2) Existing water recreation facilities shall be operated in continuous compliance with the provisions of this chapter as outlined in the life saving equipment requirements as defined in WAC 248-98-001(26), 248-98-030, 248-98-035, 248-98-045, 248-98-060, 248-98-085, 248-98-095, and 248-98-098, and provisions for lifesaving equipment in this chapter.
- (3) Existing water recreation facilities built before the effective date of this chapter revision:
- (a) Having barriers not conforming with this chapter, may maintain the barrier as it presently exists provided:
 - (i) Barrier is forty-eight inches or more in height;
- (ii) Barrier has a maximum width opening of vertical members not exceeding six inches in width;
- (iii) Each entry to the pool area has a self-closing, self-latching gate or door.
- (b) Having barriers not conforming with this chapter, must upgrade the barrier to conform with this chapter if the existing barrier height is less than forty-eight inches in height.
- (4) Facilities exempted from the regulations are noted under RCW 70.90.250 and the term medical therapy include facilities whose sole use is therapy provided for medical:
- (a) Treatment under the supervision of licensed medical practitioners; or
- (b) Rehabilitation for institutionalized patients under supervision of licensed medical practitioners.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–020, filed 3/12/90, effective 4/12/90; Regulation .98.020, effective 3/11/60.]

- WAC 246-260-060 Surveillance. (1) Owners and operators shall permit the department or local health officer to perform on-site WRF inspections or other surveillance activity as necessary in the discretion of the enforcing agency to ensure compliance with standards under chapter 70.90 RCW and chapter 248-98 WAC.
- (2) Employees of the enforcing agency shall provide appropriate identification when entering a WRF for the purpose of routine inspections.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–025, filed 3/12/90, effective 4/12/90.]

WAC 246-260-070 Water quality standards, analysis, and sample collection. (1) Contaminants. Owners

[Title 246 WAC-p 238]

shall maintain waters free from harmful levels of disease-producing organisms, toxic chemicals, or adverse physical conditions.

- (2) Bacteriological standards. Owners shall maintain WRF pool waters to meet the following standards of bacteriological quality:
- (a) Heterotrophic plate counts not to exceed two hundred bacteria per milliliter in two consecutive tests;
- (b) Total coliform not to exceed an average of one coliform per sample of one hundred milliliters in two consecutive tests when using the membrane filter test; and
- (c) Total coliform not to exceed one tube positive in two consecutive tests when using the MPN method.
- (3) **Disinfection.** Owners shall maintain continuous and effective methods of disinfection of WRF pool waters at all times with use of:
- (a) Chlorine or bromine described under Table 030.1 of this section; and/or
- (b) Alternate forms of disinfection meeting the following criteria:
- (i) Registered with the Environmental Protection Agency, if required;
- (ii) Registered with the Washington state department of agriculture, if required;
- (iii) Conformance with NSF standard 50 or equal when applicable; and
 - (iv) Adherence to department-established guidelines.
- (c) Alternate forms of disinfection for which the department has developed board-approved standards or guidelines including:
- (i) "Interim guidelines governing the use of ozone and ozonators for water recreation facilities;"
- (ii) "Interim guidelines governing the use of copper/silver disinfection processes for water recreation facilities."
- (4) Chemical and physical quality. Owners shall maintain:
- (a) Physical and chemical conditions within the ranges specified under Table 030.2 of this section;
 - (b) Cleanliness by:
- (i) Closing an affected WRF area or affected portion of a WRF area when contaminated with feces, vomit, sewage, or other hazardous or unknown material until the area is clean, disinfected, and free of the hazardous material;
- (ii) Daily removal of scum or floating material on the pool water surface;
- (iii) Continuous removal of scum or floating material by overflow action of pool water with flotsam screened and filtered; and
 - (iv) Maintaining sanitary walking surfaces.
- (c) WRF spa pools which are routinely drained, cleaned, and refilled at a minimum using the formula as follows:

Spa volume ÷ 3 ÷ average number of users/day = Number of days between

draining, cleaning, and refilling.

- (5) Laboratory sampling and testing. Persons collecting laboratory analysis water samples shall:
- (a) Collect and transport chemical and micro-organism samples based on the most recent published edition of standard methods for the examination of water and waste/water analysis, published jointly by the American Public Health Association/Water Pollution Control Federation and American Waterworks Association, referred to as "standard methods" in this chapter;
- (b) Have laboratory tests performed per "standard methods" at department-approved laboratories to provide such analyses;
- (c) Provide adequate data for completing analyses; and
- (d) Use department-approved water sample bottles for collection of samples.
- (6) Field testing. Owners shall have field testing equipment:
- (a) To provide means for measuring disinfectant residuals, pH, alkalinity, and any other chemicals routinely used in the pool water;
- (b) In pools where compressed chlorine gas is used, to detect leaks using commercial strength (twenty-six degrees Baume') ammonia vapor; and
- (c) With a suitable range of readings for the routinely measured parameters as noted under Table 030.3 of this section.
- (7) Chemicals in pool. Owners shall ensure addition of chemicals or materials to WRF pool waters only when the use is approved or recognized as acceptable by the department. The department has available to WRF pool owners the current approved or acceptable material lists.
- (8) Additional tests. Owners shall perform additional department or local health officer-directed tests.

TABLE 030.1

MINIMUM AND MAXIMUM LEVELS OF DISINFECTANTS *

			p.	H Ranges		
Cu	rrently	Type of	7.2-7.49	7.5-7.79	7.8-8.0	Maximum
Rec	cognized	Residual	Minimum	Residual	Levels	Residual
Dis	infectants	Measured	of Disinfe	ctant in pp	m	ppm **
1.	Chlorine	Free available chlorine	1.0	1.4	1.8	6
2.	Chlorinated cyanurate	Free available chlorine	1.5	2.0	2.8	6
3.	Bromine	Total available bromine	2.0	2.5	3.5	6

NOTE:

*When using spa facilities, increase minimum residuals in all categories by 1.5 ppm.

**Maximum residual as noted or manufacturer's recommendations (whichever is less). In spa facilities, maximum residual may be raised to 10 ppm or manufacturer's recommendations (whichever is less).

TABLE 030.2

ACCEPTABLE RANGES OF SELECTED CHEMICAL AND PHYSICAL WATER QUALITY CONSTITUENTS

Che	mical or Physical Constituent	Minimum	Maximum
1.	pH (Hydrogen ion)	7.2	8.0

Chemical or Physical Constituent		Minimum	Maximum		
2.	Water clarity (safety)	Main drain and pool bottom visible at all times	<u> </u>		
3.	Turbidity (shielding micro- organisms from disinfec- tion)		0.5 TU*		
4.	Cyanuric acid or its deriva- tives (if used)	. 0	90 ppm		
5.	Temperature		104 F.**		
6.	Combined chlorine	·	<50% of free chlorine		
7.	ORP***	700 mv.			

NOTE:

- *In peak periods, turbidity may increase to 1.0 TU provided turbidity returns to 0.5 TU within a six-hour period following peak use. Turbidity is not a required routine analysis. Turbidity monitoring may be required by the department or local health officer if special conditions warrant turbidity monitoring.
- **A pool facility thermometer shall be provided when the water temperature exceeds 95 degrees Fahrenheit.
- ***Oxidation-reduction potential (ORP) readings used in conjunction with chlorine and bromine may be allowed as long as values are maintained no less than 700 millivolts. ORP readings do not preclude the need for field testing of the actual mg/l residual for the specific disinfectant on at least a daily basis.

TABLE 030.3

RANGE OF ACCEPTABLE TESTING LEVELS FOR FIELD TEST KITS*

Chemical Test		Minimum Range	Minimum Accuracy
1.	Free available	0.3 to 3.0 ppm	0.2 ppm to 1.0 ppm 0.5 ppm above 1.0 ppm
2.	Total chlorine	0.3 to 3.0 ppm	0.2 ppm to 1.0 ppm 0.5 ppm above 1.0 ppm
3.	Total bromine	0.3 to 4.0 ppm	0.2 ppm to 1.0 ppm 0.5 ppm above 1.0 ppm
4.	pH (hydrogen ion)	7.0 to 8.2	0.2
5.	Cyanuric Acid	0 to 100 ppm	10 ppm
6.	Alkalinity	0 to 300 ppm	15 ppm
· 7.	Temperature (spas)	60 to 110 degrees F.	1 degree F.

NOTE:

*Do not make a chemical condition determination based on readings at the extreme measurable limits of the scale.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–030, filed 3/12/90, effective 4/12/90; Regulation .98.030, effective 3/11/60.]

WAC 246-260-080 Monitoring, reporting, and record keeping. (1) Reporting death, injury, and illness. Owners shall:

- (a) Provide department or local health officer-requested information for statewide injury and illness surveillance reports; and
- (b) Within forty-eight hours, notify the department or local health officer of a drowning, near drowning, death, or serious injury or illness occurring at the water recreation facility.
- (2) Incidents. Owners shall provide department or local health officer-requested information after an incident creating a potential problem of health or safety significance, for example, chlorine gas leak.

- (3) Monitoring and record keeping. Owners shall monitor and maintain records for at least three years on the following:
 - (a) Water quality conditions on WRF pools including:
- (i) Residual disinfectant testing often enough to determine the residual is satisfactory, and in no condition shall residual disinfectant testing be done less than once every twenty-four hours;
- (ii) Hydrogen ion (pH) concentration testing often enough to determine the concentration is satisfactory, and in no condition shall testing be done less than once every twenty—four hours;
 - (iii) Checking alkalinity monitored at least weekly;
- (iv) Recording quantities of all chemicals added to pool water, including alum, algicides, cyanuric acid, acids, alkalinity compounds, etc.
- (v) Checking gauges sufficiently to assure conformance with code requirements for turnover during the filter cycle;
- (vi) Any gross water contamination, for example, vomiting, feces, etc.;
- (vii) When pool temperature is over ninety-five degrees, temperature testing sufficiently often to determine temperature is in a satisfactory range at or below one hundred and four degrees Fahrenheit and in no condition shall temperature testing be done less than once every twenty-four hours; and
- (viii) When cyanuric acid or its derivatives are used in a pool, cyanurate level testing to determine the cyanurate level is maintained below the maximum level of ninety mg/l, and in no condition shall cyanurate level testing be done less than once every week the pool is in use.
- (b) Routine preventive maintenance provided on all hazardous equipment, for example, gas chlorination equipment;
 - (c) Daily estimation of number of users;
- (d) Personnel credentials, training, and/or certifications required under WAC 248-98-045(5), 248-98-060(5), and 248-98-085(5) of this chapter.
- (4) Availability. Owners shall make records required by this section available for department or local health officer review upon request.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–035, filed 3/12/90, effective 4/12/90.]

- WAC 246-260-090 Swimming pool design, construction, and equipment. (1) Location. Owners shall locate pools to:
- (a) Minimize pollution by dust, smoke, soot, and other undesirable substances;
- (b) Eliminate pollution from surrounding surface drainage; and
- (c) Ensure pump house, trees, and other structures are located fifteen feet or more from the pool or provide barriers or other means to prevent ready access from the structure. Structures shall not be construed to include:
- (i) Building walkways above the second story or roofs of any building structure; or

- (ii) Any barriers provided to prevent unauthorized pool access, for example fencing.
- (2) Materials. Owners shall use only structure and equipment materials which are nontoxic, durable, inert, impervious to water, and easily cleanable.
- (3) Walking surfaces. Owners shall design and maintain walking surfaces:
- (a) Uniformly sloping away from the pool or pools a minimum of one-fourth inch per foot and a maximum of one-half inch per foot;
- (b) Of a nonslip finish not presenting a tripping hazard;
- (c) Equipped with sufficient drains to prevent standing water;
 - (d) Of easily cleanable, impervious finishes;
- (e) At least six feet wide on the shallow end of pool, except for:
- (i) Pools with all depths uniform at ends, at least one end six feet wide or more; or
- (ii) Circular or irregular pools at least twenty-five percent of the deck six feet wide or more.
- (f) Four feet or more in width on pools with an area fifteen hundred square feet or less;
 - (g) Six feet or more in width:
- (i) On outdoor pools fifteen hundred square feet or more;
- (ii) On fifty percent of the perimeter of indoor pools fifteen hundred square feet or more. Perimeter on remainder of the deck shall be four feet or more in width.
- (h) A minimum of sixteen square feet per bather on pools fifteen hundred square feet or more. Determine maximum bather load as described under subsection (12) of this section. If owner provides maximum facility occupancy loading less than that of subsection (12) of this section, and such occupancy limit is posted and enforced, that loading may be used in lieu of the maximum bather load figure as described under subsection (12) of this section;
- (i) In swimming pools designed for competitive use with likelihood of spectators, a minimum of six feet between spectator viewing area and the pool. Balconies shall be fifteen feet or more from the pool unless properly safeguarded from intruding into the pool area;
- (j) In conformance with department-established guidelines for any resilient artificial surfaces; and
- (k) General use pools shall not have sand and grass areas within the pool enclosure unless separated to prevent direct access from the pool area and means are provided for cleansing the bather's feet before re-entering the pool and deck area.
- (4) Barriers. Owners shall provide barrier protection to prevent unauthorized access including:
- (a) In outdoor facilities, a barrier of sixty inches or more in height with:
 - (i) Barrier:
- (A) Not allowing passage of a four-inch diameter sphere;
- (B) Horizontal members with less than forty-five inches spacing between tops of the horizontal members shall have vertical members not exceeding one and three-quarter inches in width;

- (C) Horizontal members with forty-five inches or more spacing between tops of the horizontal members shall have vertical members not exceeding four inches in width.
- (ii) Lockable gates and entrances provided with a self-closing, self-latching mechanism fifty-four inches or more from the ground with a clear space fifty inches deep on the latch side of the door to position a wheel-chair. When a latching mechanism is provided at any lower height, the latching mechanism shall be of a type remaining continuously locked, and only opening with the use of a key or other access control system.
- (b) At outdoor facilities not a part of living facilities, such as in a municipal park, a barrier six feet or more shall be provided to prevent unauthorized access:
- (c) Indoor facility barriers sixty inches or more in height, suitable to prevent access of unauthorized individuals;
- (d) Restricted area service entrances shall be exempt from door or gate requirements providing no public access is available;
- (e) Lifeguarded pools are not required to have a selfclosing, self-latching gate during the period a pool is in use. Facility gates shall be closed and locked during nonuse periods; and
- (f) An entrance to the pool area which shall not serve as a required exit from another part of the building when there is a conflict with other codes or regulations.
- (5) Pool surfaces. Owners shall ensure pool surfaces with:
- (a) Materials complying with subsection (2) of this section;
 - (b) Water tight and nonabrasive construction; and
- (c) White or light color finish not obscuring the view of objects or surfaces;
- (d) Surfaces not causing cutting, pinching, puncturing, entanglement, or abrasion hazard under casual contact; and
- (e) Construction tolerances conforming with current NSPI public pool standards.
- (6) Pool general floor and wall dimensional design. Owners shall ensure pool dimensional designs for floors and walls provide for safety, circulation, and quality of the water including, but not limited to:
 - (a) Uniform pool floor slopes as follows:
- (i) Pools fifteen hundred square feet or more providing a maximum slope of one foot drop in twelve feet of run at pool depths to five and one-half feet;
- (ii) Where diving provisions are included, floor slopes not intruding into the area designated as the diving envelope; and
- (iii) A slope change transition zone (breakpoint from shallow to deep areas of pool) providing warning of the break in slope into diving or deep pool areas consisting of a two-foot wide ramp sloped at twice the slope of the shallow bottom.
- (b) Pool vertical walls may be curved, not to exceed allowable radius, to join the floor for minimum distance as noted under Table 050.1 of this section. Vertical means walls not greater than eleven degrees from plumb:

- (i) Coving or portion of the side wall of a pool diving area shall conform as required and as described under subsection (7) of this section; and
- (ii) In new construction or alterations to existing construction, ledges are prohibited.
- (c) A maximum intrusion for pool walls beyond the vertical, as defined under subsection (6)(b) of this section, with any configuration not to exceed a transitional radius from wall to floor where floor slopes join walls and which has:
- (i) Center of radius not less than the minimum vertical depth specified under Table 050.1 of this section below the water level;
 - (ii) Arc of radius tangent to the wall; and
- (iii) Maximum radius of coving, or any intrusion into the pool wall/floor interface, determined by subtracting the vertical wall depth from the total pool depth.

TABLE 050.1 MAXIMUM RADIUS COVING OR POOL INTRUSION DIMENSIONS BETWEEN POOL FLOOR AND WALL* 5'0' >5'0" Minimum Sidewall 2121 2'6' 3'6' @>3'6" Vertical Depth (Springline) 10" 12' 1'6' **Maximum Maximum Radius of Curvature radius equals pool depth minus the vertical wall

NOTE:

*For pool depths falling between the depths listed, values can be interpolated.

depth

- **Radius of coving cannot intrude into pool within diving envelope.
- (7) Specific design requirements for pools furnishing areas for diving. Owners shall ensure provision of diving envelopes in pools or areas of pools designated for diving activities to include a diving envelope not less than the:
- (a) APHA standard configuration noted under figure 050.2 of this section in areas where user would enter from the deck level twelve inches or less from water level. This requirement is based on a standard described under APHA public pool regulations, 1981, for pool type described under D-8.01 Table 1, the section noting the requirements from deck level;
- (b) CNCA standard configuration noted under figure 050.3 of this section in areas where the user would enter from the deck level over twelve inches from water level, or has a platform or diving board provided at a height of less than one-half meter (twenty inches). This requirement is based on a standard described under CNCA publication Swimming Pools: a Guide to their Planning, Design, and Operation 1987, Fourth Edition. Human Kinetics Publisher, Inc., Champaign, Illinois, figure 8.1; and
- (c) FINA standard configuration noted under figure 050.4 of this section in areas where the user would enter from the diving board or platform at a height of one-half meter (twenty inches) or greater. This requirement is based on a standard described in FINA publication

FINA Handbook, 1986-88, constitution and rules governing swimming, diving, water polo, and synchronized swimming, 1986-88. Edited by E. Allen Harvey, Vancouver, Canada VGN 3R6, Section D, pp. 114-115.

FIGURE 050.2

MINIMUM DIMENSIONS FOR POOLS WITH DIVING FROM DECK LEVEL WHICH IS LESS THAN TWELVE INCHES FROM THE WATER LINE

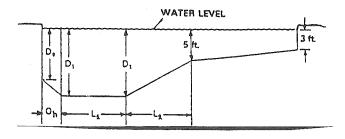
APHA STANDARDS* D-8 DIVING AREA REQUIREMENTS

D - 8.01

The dimensions of the diving area on all swimming pools providing diving from deck level shall conform to the following dimensions:

Table 1. The diving area dimensions on all swimming pools providing diving from deck level.

Heights			Lengths	
Height of Deck Above Water Level Out	Water	Depths	Length of Diving Well	Run-
H 12" or less	D(0) 6 ft	D(1) 8.5 ft	L(1) 12 ft	L(2) 10.5 ft
Over 12 inches		CNCA	r over twelve inches or FINA in inch	



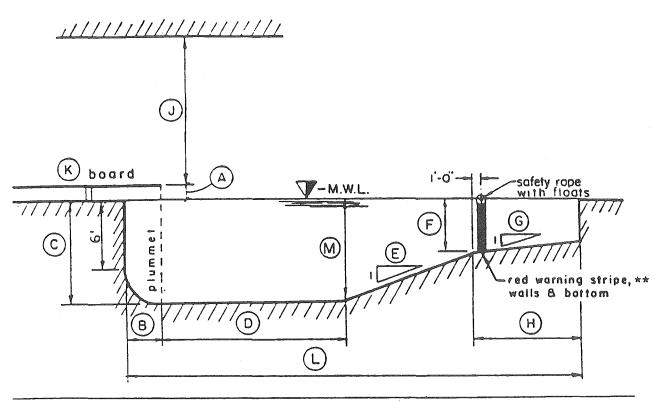
NOTE:

*The department underlined areas for clarification.

Figure 050.3

Minimum dimensions for pools with boards or platforms at a height of less than 1/2 meter (20 inches)

CNCA STANDARDS



Dimension	Minimum	Preferred o Maximum	
A Height of board above water		20 in.	
B Board overhang	2 ft 6 in.	3 ft	
C Depth of water at plummet	9 ft	10 ft ★	
D Distance from plummet to start of upslope	16 ft	18 ft *	
E Inclination of upslope of bottom		1:3	
F Depth of water at breakpoint	4 ft 6 in.		
G Slope of bottom in shallow portion of pool	1:12	1:15 *	
H Length of shallow section of pool	8 ft	14 ft *	
Distance to any overhead structure	13 ft	15 ft *	
K Board length		12 ft	
L. Length of pool	40 ft	50 ft *	
M Dimension not less than C minus	6 in.		

NOTE (FROM FIGURE 050.3):

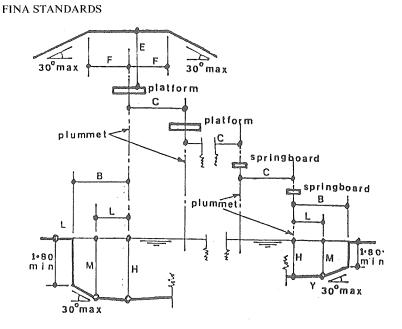
^{*}Values with asterisks are not to be considered as maximums.

^{**}Warning stripe at break point may be of any contrasting color.

FIGURE 050.4

MINIMUM DIMENSIONS FOR POOLS WITH BOARDS OR PLATFORMS AT A HEIGHT OF 1/2 METER OR MORE

platform or springboard platform under A/A platform A D 1-80 min H K 1-80 min A 30°max



LONGITUDINAL SECTION DIAGRAMMATIC ONLY

CROSS SECTION DIAGRAMMATIC ONLY

	FINA	Dimensions	Sp	ring	gboa	rd				Pl	atfo	rm		Carrie Citization (1990)		
	Dimensions for	are in Metres		-	3 Ме		1 M	etre	3 Ме	tres	5 Me	tres	7.5 14	etres	10 Me	tres
	Diving Facilities	LENGTH		80	-	80		50	5.0		6.1	00	6.	00	6.	00
···	Diving racificles	WIDTH	0.		0.			60	1						- 2.	00
	Revised to 1st Jan 1987	HEIGHT		00	3.	graph and the second flow	0.60-		2.60-			And in concession,	7.5	- washington	10.	
			NOUIS	YERT	HORIS	VERT	HORIZ			VERT	HORIZ	VERY	HORIZ		HORIZ	VERT
Λ	From plummet	ESIGNATION	A-1		N-3		A-Ipl		A-3p1		A-5		A-7.5		A. 10	
-11	BACK TO POOL WALL	HINIHUH	1.80		1.80		0.75		1.25		1.25		1.50		1.50	
\mathbf{A}/\mathbf{A}	From plummet BACK TO PLATFORM	DESIGNATION									AA5/1		W75/3	1	VA 10/5	/3/1
4 8/ **	plummet directly below	HUHIHIH		_	1		1		1		1.50		1.50	:	1.50	
В		DESIGNATION	B-1		B-3		3—1p1		B-3p1		B-5		B-7.5		B-10	
	POOL WALL AT SIDE	HIMIMIN	2.50		3.50		2.30		2.90		4.25		4.50		5.25	
c	From plummet to	DESIGNATION	C-1/1		C-3/3/	ı	C-1/1p	h	C-3/1;	1/3p1	C-5/3/	1	G 7-5/5	3/1	5-10/2	0/5/3/
	ADJACENT PLUMMET	HINIHUH	2.40		2.60		1.65		2.10		2.50		2.50		2.75	
D		DESIGNATION	D-1		D-3		D-1p1		D-3p1		D-5		D-7.5		D-10	
		MININUM	9.00	L	10.25		B.00		9.50		10.25		11.00		13.50	
Е		DESIGNATION		E-1		ε.3		E-ipl		E-3p1		E.5		E-7.5		E-10
15	BOARD TO CEILING	HINIKUK		5.00		5.00		3.50		3.50		3.50		3.50		5.00
Ŧ	CLEAR OVERHEAD behind and each	DESIGNATION	F-1	E-1	F-3	E-3	F-lpl	E-ipl	F-3p1	E-3p1	F-5	E~3	₹-7.5	E-7.5	F-10	E-10
1		HINIHUH	2.50	5.00	2.50	5.00	2.75	3.50	2.75	3.50	2.75	3.50	2.75	3.50	2.75	5.00
	CLEAR OVERHEAD	DESIGNATION	G-1	E-1	G-3	E-3	G-IP1	E-ipl	G-3p1	E-3p1	G-5	E-5	G-7.5	E-7.5	G-10	E-10
G	ahead of plummet	HINIHUH	5.00	5.00	5.00	5.00	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50	6.00	
Н	DEPTH OF WATER	DESIGNATION		H-1		H-3		M-Ipl	٠.	H-3p1		N-8		H-7.5		M-10
п	at plummet	HINIMUH		3.50		3.80		3.30	,	3.60		3.80		4.50		5.00
J	DISTANCE AND DEPTH	DESIGNATION	J-1	K-1	J-3	K-3	J-1pl	K-lpl	J-3p1	K-3p1	J-5	1:-5	J-7.5	K-7.5	J-10	K-10
K	ahead of plummet	HUMINUH	5.00	3.40	6.00	3.70	5.00	3.20	6.00	3.50	6.00	3.70	8.00	4.40	11.00	4.75
L	DISTANCE AND DEPTH	DESIGNATION	L-1	M-1	L-3	н-3	L-Ipl	H- Ip)	L-3p1	И− З р l	L-5	M-5	L-7.5	H-7.5	L-10	H- 10
14	each side of plummet	MINIMUM	1.50	3.40	2.00	3.70	1.40	3.20	1.80	3.50	4.25	3.70	4.50	4.40	5.25	4.75
И	MAXIMUM SLOPE TO REDUCE DIMENSIONS beyond tull requirements		30 des		NOTE	wi	th wid	ths as		led. F	or wid		mmet) a atforms			

- (8) Pool appurtenances. Owners shall ensure swimming pools:
- (a) Have handholds around the perimeter in pools two feet or more in depth. Handholds shall be four feet or less apart and consist of any one or a combination of the following:
- (i) Coping, ledges, radius flanges, or decks along the immediate top edge of the pool or suitable slip—resisting handholds located twelve inches or less above the waterline:
 - (ii) Ladders or steps; or
- (iii) Secured rope or railing twelve inches or less above the water line.
 - (b) Have stairs, ladders, or stepholes with:
- (i) Stairs, when provided, meeting the following construction requirements:
 - (A) Nonslip tread finish;
- (B) Contrasting color stair tread edges clearly visible to users;
- (C) Recessed in pool areas used for lap or competitive swimming to prevent intrusion into the activity areas;
- (D) Handrails with the leading edge for stairs at pool entry/exit being neither eighteen inches or more beyond nor eight inches or more inside (horizontally) the vertical plane of the bottom riser;
- (E) Riser treads with a minimum unobstructed, horizontal, ten-inch tread depth and a minimum two-hundred-forty-inch surface area;
- (F) Riser heights, on general use pools fifteen hundred square feet or more, uniform and seven and one-half inches or less, except the bottom riser may be less than the uniform height; and
- (G) Riser heights, on general use pools less than fifteen hundred square feet, and limited use pools, uniform and have a preferred seven—and—one—half—inch height, but not greater than ten inches, except the bottom riser may be plus or minus two—inches of the uniform height.
 - (ii) Ladders or stepholes:
- (A) Spaced at a minimum of one for every seventy—five feet of pool perimeter deeper than four feet;
- (B) Provided at both sides of the deep end of pools over thirty feet in width; and
- (C) Equipped with a handrail at the top of both sides extending over the coping or deck edge.
- (iii) Means of access at the shallow end of the pool; and
- (iv) Designs permitting entry and exit for impaired or handicapped persons are encouraged.
- (c) Diving boards and diving platforms, when provided, shall:
- (i) Be installed according to manufacturer's instructions;
 - (ii) Have slip-resistant tread surfaces;
- (iii) Have steps and ladders leading to diving boards which provide handrails.
- (iv) Be protected with forty-two inch high guardrails extending at least to the water edge when one meter or more above the water.
 - (d) Starting blocks, when provided, shall:

- (i) If on the shallow end of pool, be removed when not in use by the competitive swimmers trained in starting blocks proper use; and
 - (ii) Be firmly secured when in use.
 - (e) Water slides, when provided, shall:
- (i) Be installed according to manufacturer's instructions and be approved by the manufacturer for general use and limited use pools; and
- (ii) Conform to Part 1207 of the Consumer Product Safety Act (Sec. 7(f), P.L. 92–573, 86 Statute 1215, 15 U.S.C. 1056(f)); or
- (iii) If not manufactured for general use and limited use pools, conform to requirements under chapter 248–97 WAC, Recreational Water Contact Facilities.
- (9) Turnover. Owners shall ensure pools turn over entire pool water volume in six hours or less. Exceptions to recirculation requirements may be made for flow—through pools in the following conditions where:
- (a) Water supply is sufficient to provide the same turnover period specified for recirculation pools;
- (b) The source water supply meets acceptable quality requirements and is subject to a disinfection method as described under WAC 248-98-030(3);
- (c) The introduction of fresh treated pool water is accomplished by the same type of inlet and outlet design required for recirculation pools; and
- (d) The pool water quality complies with WAC 248-98-030.
- (10) **Pool depth markings.** Owners shall provide depth markings:
- (a) Plainly marking the water depth in feet on the vertical wall at or above the water level and on the horizontal surface of the coping or deck edge;
- (b) Positioned on the vertical pool wall to be read from the water side. Where markings cannot be placed above the water level, markings shall be placed in other areas and plainly visible to users in the pool;
- (c) Located on the coping or deck within eighteen inches of the water edge and positioned to be read while standing on the deck facing the water;
 - (d) Which are slip resistant:
- (e) Placed at the maximum and minimum water depths and at all points of slope change;
- (f) Installed at intermediate increments of water depth not to exceed two feet, nor spaced at distances greater than twenty-five foot intervals;
- (g) Uniformly arranged on both sides and ends of the pool;
- (h) On irregularly shaped pools, meeting the requirements in subdivision (a) through (g) of this subsection and also designate the depths at all major deviations in shape;
- (i) With a four-inch minimum height on the deck and a two-inch minimum height on the vertical pool wall; and
- (j) Applied in a contrasting deck color which does not fade.
- (11) Safety line or marking line. Owners shall provide safety (float) lines or marking lines (lines on pool sides and bottom) separating areas where the pool slope

breaks from a uniform slope leading from shallow to deeper water.

- (a) Safety lines when used shall:
- (i) Be kept in place at all times, except when the pool is used for a specific purpose such as lap swimming or competitive use;
- (ii) Be placed one foot toward the shallow end away from the break point line. See subsection (6)(a)(iii) of this section;
- (iii) Be strung tightly allowing the bather to hold onto the line for support;
 - (iv) Have a receptacle for receiving the safety line:
 - (A) Recessed in the wall; or
- (B) Not constituting a safety hazard when the safety line is removed.
- (v) Provide floats on the line at a minimum distance of every four feet.
 - (b) Markings lines when used shall:
- (i) Provide a minimum three—inch wide marking line at the break point where the pool slope breaks from a uniform slope leading from shallow to deeper water; and
- (ii) Be of a contrasting color to the background color of the pool sidewalls and floor.
- (c) In pool facilities with uniform slopes not exceeding one foot in twelve feet to deep portions of the pool, a safety line or marking line shall not be required.
- (12) **Bather load.** Owners shall ensure maximum number of bathers in the pool facility at any one time do not exceed a number determined by the formula noted under Table 050.5 of this section.

TABLE 050.5

SWIMMING POOL MAXIMUM BATHING LOAD* (SPMBL)

$$SPMBL = \frac{A - S}{(30)} + \frac{S}{(15)}$$
 For outdoor pools
$$SPMBL = \frac{A - S}{(30)} + \frac{S}{(25)}$$
 For indoor pools

Where

A = Total area of water surface in square feet

S = Area of pool less than 5 feet deep in square feet

NOTE:

- *This formula will be used in determining certain features of pools as noted elsewhere in these rules and regulations.
- (13) **Inlets.** Owners shall provide pool inlets:
- (a) Submerged and located to produce uniform water and chemical circulation throughout the pool; and
- (b) Located on the bottom of pools twenty-five hundred square feet or more, unless otherwise justified by the design engineer to the department's or local health officer's satisfaction.
 - (14) Outlets. Owners shall provide pool outlets with:
- (a) Overflow and main drain grating systems each designed to carry one hundred percent of the total recirculation filter flow and main drain piping designed to carry fifty percent or more of total recirculation filter flow:

- (b) Overflow outlets that maintain:
- (i) A minimum of sixty percent of filter recirculation flow at all times; and
- (ii) An overflow channel which may be used on any pool and required on pools twenty-five hundred square feet or more on the pool perimeter to promote uniform circulation and skimming action of the upper water layer with:
- (A) A design preventing all matter entering the channel from returning to the pool;
- (B) Dimensions minimizing the hazard for bathers, such as catching arms or feet;
- (C) One one-hundredth of a foot slope per foot or more:
- (D) Drains sufficiently spaced and sized to collect and remove overflow water to return line and filter, where applicable; and
- (E) Size sufficient to carry one hundred percent of the recirculation flow plus the surge flow equivalent to one-fifth of the balancing tank expressed in gallons per minute.
- (iii) Skimmers in lieu of pool overflow channels up to twenty-five hundred square feet if:
- (A) Weir provided in skimmer has a maximum flow rate through skimmer not exceeding four gpm per inch of weir;
- (B) Devices are recessed in the pool wall so no part protrudes beyond the plane of the wall into the pool;
- (C) The skimmer is equipped with a device to prevent air lock in the recirculation suction line, such as, an equalizer line;
- (D) The skimmer is equipped with a removable and cleanable screen designed to trap large solids;
- (E) Automatically adjustable and operates freely with continuous skimming action to continue through all designed loading rates. Displacement shall be computed at fifteen gallons per bather.
 - (c) Main drains in all pools with:
 - (i) Location at the pool's low points;
 - (ii) A minimum of two main drains spaced:
- (A) Twenty feet or less apart nor closer than six feet; or
- (B) As far as possible from each other in pools seven feet or less linear floor distance.
- (iii) Total open area of grates sized to prevent a suction or entrapment hazard dangerous to user;
 - (iv) Grates on drains with:
- (A) Maximum flow of one and one-half feet per second; or
- (B) Net outlet area four times or more the area of the discharge pipe.
 - (v) Openings one-half inch or less wide;
 - (vi) Grates designed to withstand forces of users;
 - (vii) Grates removable only with specific tool; and
- (viii) Means to control flow from recirculation pump or balancing tank.
- (15) Flow. Owners shall maintain pool recirculation flow not to exceed:
- (a) Six feet per second in valved suction or discharge side of the pump; and

- (b) Ten feet per second in open discharge pipes on the pressure side of the pump or filter discharge. The recirculation flow limit does not apply to the return inlet and the last two feet of pipe leading to the inlet.
- (16) Balancing tanks. Owners with overflow channels requiring balancing tanks shall:
- (a) Maintain volume equivalent to fifteen times maximum bathing load expressed in gallons; and
- (b) Increase capacity as necessary to provide volume for make-up water and to prevent air lock in the pump suction line.
- (17) **Pumps.** Owners shall have and maintain recirculation pumps with adequate capacity to:
- (a) Provide design flows and pressure for water recirculation over the entire operating filter pressure;
- (b) Allow proper back washing of filters when specified; and
- (c) Have self-priming capability when installed above pool water level.
- (18) **Strainers.** Where pumps precede the filter, owners shall equip pool recirculation facilities with hair and lint strainers which shall:
 - (a) Be located upstream of recirculation pumps;
- (b) Provide strainer screen sufficiently strong to prevent collapse when clogged;
 - (c) Have an openable cover; and
- (d) Provide valving to isolate the strainer when located below pool water level.
- (19) Valves. Owners shall provide valves at appropriate locations to allow isolation and maintenance of equipment.
- (20) Equipment rooms. Owners shall provide equipment rooms:
- (a) Enclosing pumps, disinfection equipment, filters and other electrical and mechanical feed equipment and associated chemicals. Chemical storage shall conform to manufacturer requirements;
- (b) Providing work space and access to perform routine operations;
- (c) With a forty-six-square-foot minimum floor area and provide a three-foot minimum access area to service equipment;
- (d) With one floor drain or more and a floor slope to the drain at a one-fourth-inch-per-foot minimum;
 - (e) Ready access if below grade;
 - (f) Ventilation;
- (g) Twenty foot-candles or more of light measured thirty inches from the floor; and
 - (h) Kept locked.
- (21) Make-up water. Owners shall ensure a source of make-up water and associated piping at the pool:
- (a) Providing sufficient quantity to replace daily pool losses:
- (b) Coming from a supply conforming with chapter 248-54 WAC;
- (c) Preventing cross connections using a minimum air gap of two pipe diameters or approved backflow prevention devices between the make—up water source and the pool water or waste water; and

- (d) If using a pool fill spout, not projecting greater than one inch into the space above the water surface area and shielded to not create a deck hazard.
- (22) Filters. Owners shall equip pools with filtration equipment:
- (a) Meeting the applicable standards of NSF or equivalent;
- (b) Using acceptable type and filter rates described under Table 050.6 of this section;
- (c) Having pressure or vacuum gauges for measuring loss of head through the filter with minimum of one gauge preceding and one gauge following the filter;
- (d) Having a rate of flow indicator to measure flow which has accuracy, repeatability, and durability equivalent to flow meters meeting NSF standards; and
- (e) Having a means of discharging filter backwash to waste with:
- (i) Discharge in a manner not creating a public nuisance;
- (ii) Disposal in accordance with applicable local laws or regulations;
- (iii) Minimum air gap of two pipe diameters to prevent cross-connection from waste discharge and recirculation system piping;
- (iv) Discharge receptor and piping of sufficient size to accept backwash water and prevent flooding; and
- (v) Ability to monitor filter effluent during backwash, that is, use of a sight glass.
- (f) Providing means to release air entering the filter tank on pressure filters;
 - (g) When cartridge filters are used:

Pance of Acceptable Filter Rate

- (i) Provide with an extra set of cartridges; and
- (ii) Have any bypass valves in a permanently closed position.
- (h) When using pressure DE filters with separation tanks:
- (i) Provide a means of air release or a lid providing a slow and safe release of pressure; and
- (ii) Show a readily visible user warning that the air release must be opened before starting the circulation pump.

TABLE 050.6

TYPE AND RANGES OF FILTERS FOR SWIMMING POOLS

Type of Filter Media		Expressed in gpm/Square Feet					
Sand		Minir	Maximum				
	Rapid Sand or Pressure Sand High Rate Sand Pressure	~		3			
	or Vacuum	10		18*			
		Continuous Feed	Manual Feed				
D.E.							
	Pressure	0.8	1.0	2.0			
	Vacuum	1.0	1.35	2.0			
Cartri	dae**			375			

NOTE:

- *Filters which are sized at maximum application rate shall be equipped with flow control valves to maintain flow equilibrium to account for varying filter pressures and consequent flow production.
- **Cartridge filters shall have a nominal micron rating of twenty microns or less.
- (23) **Disinfection equipment.** Owners shall provide disinfection equipment:
- (a) Providing a continuous and effective disinfectant residual in the water;
- (b) Using a disinfectant with an easily monitored residual;
- (c) Having a design feed rate providing effective disinfection levels when the pool is in peak demand conditions:
- (d) Having easily cleanable equipment and piping used to apply chemicals and with provisions to prevent undue clogging. All materials shall be resistant to action of chemicals used;
- (e) Conforming to NSF standards if disinfection equipment has:
- (i) Adjustable output rate chemical feed equipment for liquid solutions. The equipment shall:
- (A) Feed under positive pressure in the recirculation system;
 - (B) Provide means for dosage adjustment;
- (C) Have provisions to prevent hypochlorite solution siphoning when equipment is turned off. This applies when the disinfection equipment is above pool water level.
- (ii) Flow through chemical feed for solid feed material. Solid tablets or granules shall not be placed in skimmer baskets accessible to the public.
- (f) Allowing hand feeding on an emergency basis only;
- (g) Meeting the following conditions when using chlorine gas:
 - (i) Chlorine rooms shall:
 - (A) Be above ground level;
- (B) Be constructed so all openings or partitions with adjoining rooms are sealed;
- (C) Be located with consideration of prevailing winds to dissipate leaked chlorine away from the pool facility;
- (D) Have door opening outward only and to the out-of-doors;
- (E) Provide a sign on the door exterior reading DANGER CHLORINE. The sign shall be large enough to be read twenty-five feet away.
- (ii) Chlorine rooms shall have mechanical exhausting ventilation including:
- (A) Air inlet located as far as possible from fan intake to promote good air circulation patterns;
- (B) Minimum of one air change per minute in the chlorine room when fan is operating;
- (C) A remote switch outside the room or a door-activated switch to turn on fan before entering;
 - (D) Suction for fan near the floor;
- (E) Exhaust for fan and chlorinator vent located to prevent contaminating air intake and prevent undue hazard for the pool facility users; and

- (F) Screened chlorinator vent.
- (iii) Gas chlorine systems shall:
- (A) Be vacuum injection type, with vacuum-actuated cylinder regulators;
- (B) Provide integral backflow and anti-siphon protection at the injector; and
- (C) Provide taring (net weight of cylinder gas) scales for determining chlorine weight.
- (iv) Breathing protection available in an accessible area for the operator outside of the chlorine room including:
- (A) Self-contained breathing apparatus designed for use in a chlorine atmosphere for working with chlorine leaks and maintained in accordance with department of labor and industries standards; or
- (B) Provisions to substitute breathing protection at the site, if procedures can be established and documented with emergency service fire districts or other approved organization within the area for promptly responding to chlorine leaks.
- (v) Means for automatic shutoff when pool flow is interrupted; and
 - (vi) Chlorine gas cylinders shall:
 - (A) Be stored only in chlorine rooms;
- (B) Have approved valve-stem cylinder wrench on the valve stem to shut the system down in an emergency event:
 - (C) Be properly secured to prevent tipping;
- (D) Be tagged to indicate cylinders are empty or full; and
- (E) Not exceed one hundred fifty pounds tare weight per cylinder. If one-ton cylinder use is desired, an engineer specializing in chlorine design shall prepare a design proposal for department consideration.
- (24) Chemical feeding equipment for pH control. Owners applying chemicals for controlling pH through chemical feed equipment shall provide equipment with:
- (a) Adequate size and design to allow routine cleaning and maintenance;
 - (b) Materials resistant to chemical action:
- (c) Means for automatic shut off when pool flow is interrupted;
- (d) Chemical feed equipment for pH control on pools fifty thousand gallons volume or greater;
 - (e) Any pool feeding with:
 - (i) Caustic soda (NAOH);
 - (ii) Carbon dioxide (CO₂); or
- (iii) Other chemicals the department determines necessary to require metered and controlled feeding.
- (25) Heaters. Where pool heating equipment is provided, owners shall:
- (a) Locate equipment so any standing pilot is readily accessible; and
 - (b) Install equipment per NEC and UMC.
- (26) Ventilation. Owners shall provide indoor pool facility ventilation conforming with ASHRAE pool facility standards.
- (27) **Testing equipment.** Owners shall use testing equipment as noted in the water quality section under WAC 248-98-030(6).

- (28) Chemical storage. Owners shall ensure chemical storage design and placement minimizes safety risks.
- (29) Restroom, locker room, and plumbing fixtures. Owners shall provide restroom, locker room, and plumbing facilities at pools as follows:
 - (a) General use swimming pool facilities with:
 - (i) Minimum components including:
 - (A) Dressing rooms;
 - (B) Showers;
 - (C) Toilets and urinals;
 - (D) Lavatories; and
 - (E) Hose bibs.
- (ii) A design providing easy accessibility to toilet and shower facilities by users with minimum cross traffic of nonusers;
 - (iii) Locker rooms including:
- (A) Separate facilities for both sexes with provisions to block line of sight into locker rooms;
 - (B) Nonslip floors with suitable drains;
- (C) Junctions between walls and floors coved for ease of cleaning; and
- (D) Adequate ventilation to prevent moisture buildup in the facility.
- (iv) Plumbing fixtures as described under Table 050.7 of this section;
 - (v) Shower facilities that:
- (A) Deliver water at a temperature range of ninety to one hundred ten degrees Fahrenheit; and
 - (B) Provide single service soap in nonglass dispensers.
 - (vi) Flush toilets and toilet tissue in dispensers;
 - (vii) Sinks provided with:
 - (A) Tempered or hot and cold running water;
 - (B) Single service soap in nonglass dispensers; and
 - (C) Single service towels or electric hand dryers.
 - (viii) Hose bibs with vacuum breakers provided:
- (A) At a maximum spacing of one hundred fifty feet around pool deck; and
- (B) Within the equipment room at facilities having pools fifteen hundred square feet or more.
- (ix) Janitor sink with a vacuum breaker at pools greater than fifteen hundred square feet; and
- (x) Sewage disposed of in a manner approved by the department or local health officer.
- (b) Limited-use swimming pool facility plumbing as described under Table 050.8 of this section.

TABLE 050.7

PLUMBING FIXTURE MINIMUM REQUIREMENTS FOR GENERAL USE SWIMMING POOLS AMOUNT OF FIXTURES REQUIRED FOR OCCUPANCY LOAD BY SEX

Type of Fixtur	e	Male	Female
1. Toilets	up to 120	1/60	1/40
	from 121-360 add	1/80	1/60
	over 360 add	1/150	1/100
2. Urinals	up to 120	1/60	ŃΑ
	from 121-360 add	1/80	
	over 360 add	1/150	
3. Showers	up to 120	1/40	1/40
	from 121-360 add	1/60	1/60
	over 360 add	1/100	1/100
4. Sinks	up to 200	1/100	1/100
	from 201-400 add	1/200	1/200
	over 400 add	1/400	1/400

	Male	Female
One hose bib accessible to each locker room and provided with a vacuum breaker.		
One*		
	each locker room and provided	One hose bib accessible to each locker room and provided with a vacuum breaker.

NOTE

*Required for pools 1500 square feet or greater.

TABLE 050.8

PLUMBING FIXTURE MINIMUM REQUIREMENT FOR LIMITED USE SWIMMING POOLS

Pools with:	Toilets	Showers	Sinks	Dress.Rm.
1. Living units within				
100 feet and less than				
3 stories	_	_		
2. Living units > 100				
feet but <500 feet and				
less than 3 stories.	1		1	_
3. Living units within	1(M)		1(M)	-
1/4 mile and/or with	1(F)	_	1(F)	-
3 or more stories.*	` ,		` '	
4. Living units greater	1(M)	1(M)	1(M)	1(M)
than 1/4 mile.**	1(F)	. 1(F)	1(F)	1(F)

NOTE:

*Consideration for elevators adjacent to pool may allow variance from this requirement.

**When pool bathing load for the proposed facility exceeds a capacity of 150 people, the fixture units provided at limited use facilities shall conform with the general use requirements in Table 050.7.

- (c) If owners limit the number of people within their facility to a certain number and post maximum occupancy loading, the number of plumbing fixture units may be based on that maximum occupancy.
- (30) Lighting. Owners shall design and maintain pool facility lighting to:
- (a) Illuminate indoor facilities, outdoor facilities used after dusk, and locker room facilities with a minimum lighting intensity maintained thirty inches above any walking surface, pool deck, or pool area of:
 - (i) Thirty foot-candles at indoor facilities;
 - (ii) Fifteen foot-candles at outdoor facilities;
 - (iii) Twenty foot-candles in locker rooms.
- (b) Allow lifeguards or attendants to clearly see pool areas and walking surfaces;
- (c) Meet any additional lighting requirements deemed necessary by the department or local health officer;
- (d) Provide protective shielding for all lighting fixtures above walking surfaces and pool areas; and
- (e) Provide all indoor facilities with one or more pool area emergency lights designed to turn on in the event of a power failure. The emergency lighting shall conform to requirements of UL standard 924.
- (31) Emergency equipment. Owners shall provide first aid and emergency equipment readily available during operating hours as follows:
 - (a) General use swimming pool facilities:
- (i) A telephone within the facility with a prominently displayed list of emergency medical service response numbers;
- (ii) Sufficient and suitable area provided to accommodate persons within the facility requiring first aid treatment and necessary first aid equipment;

- (iii) A supplied first aid kit as follows:
- (A) For general use pools fifteen hundred square feet or more, a standard twenty-four unit kit;
- (B) For general use pools less than fifteen hundred square feet and limited use pools, a standard sixteen unit kit;
 - (iv) Two or more blankets reserved for emergency use;
- (v) A backboard with means to secure victim to board and provide immobilization of head, neck, and back at pools requiring lifeguards;
 - (vi) Devices to aid victims in distress as follows:
- (A) For pools with width less than twenty-four feet, rescue poles one-half the pool width or more;
- (B) For pools with width twenty-four feet or more, rescue poles twelve feet or more in length;
- (C) One or more of the poles with a double crook life hook in pools without lifeguards;
- (D) One or more reaching poles for every fifteen hundred square feet of pool surface area;
- (E) Throwing ring buoy, heaving jug, heaving line, throw-rope bag, or other similar devices with rope the width of the pool or fifty feet, whichever is less for reaching and retrieving victim;
- (F) Rescue tube or rescue buoy at each lifeguard station.
 - (b) Limited use swimming pool facilities:
- (i) During period facility is open for use, one of the following:
 - (A) A telephone within one minute access;
- (B) Alternate means of reaching emergency medical service response numbers;
- (C) Provision of an audible emergency alarm to alert others at area of need to respond.
- (ii) Comply with requirements under subsection (31)(a)(iii), (iv), and (vi) of this section.
- (32) Lifeguard chairs. Owners shall provide lifeguard chairs as follows:
- (a) Where lifeguards are required and pools have depths greater than five feet, at least one lifeguard chair shall be provided adjacent to the deep area of the pool;
 - (b) Installed to manufacturer standards.
- (33) Signs. Owners shall provide signs at pools which must convey the following conditions, but may be conveyed by any combination of words, pictures, or symbols:
 - (a) Prohibition of running or horseplay;
- (b) Prohibition of use by persons with communicable diseases;
- (c) Prohibition of use by persons under the influence of alcohol or drugs;
- (d) Requirement for a cleansing shower before entering the pool;
- (e) Warning that persons refusing to obey the regulations are subject to removal from the premises;
 - (f) Prohibition of food or drink in the pool water;
- (g) In pools where lifeguards are not present, post requirements for facility use as described under WAC 248-98-060 (3)(b)(iii) and (c);
- (h) Location of nearest telephone for emergency use or emergency notification procedure.
- (34) Food service. When food service is provided, owners shall:

- (a) At general use pool facilities, ensure food and beverage sale and consumption areas are separated from pool and deck enclosure areas. Special provisions may be made for allowing food and beverage service on the walkway provided a minimum six feet clear area is maintained between the pool edge and any tables or chairs provided for special facility functions;
- (b) At limited use pool facilities, prohibit food and beverage in the pool water and maintain a minimum four foot clear area between pool edge and any tables and chairs provided for food service;
 - (c) At general use pool facilities, prohibit alcohol;
- (d) At limited use pool facilities, when alcohol is sold within the pool facility, provide an attendant at the pool area;
 - (e) Provide trash containers;
 - (f) Prohibit glass containers in the pool facility.
- (35) Drinking fountain. Owners shall provide an operable drinking fountain at general use swimming pools fifteen hundred square feet or more. Drinking fountains shall conform with American Standards Association requirements.
- (36) Foot baths. Owners shall prohibit the use of foot baths at water recreation facilities. This does not preclude use of foot showers, provided the area is well drained.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–050, filed 3/12/90, effective 4/12/90; § 248–98–050, filed 10/3/67; Regulation .98.050, effective 3/11/60.]

WAC 246-260-100 Operation of swimming pool facilities. (1) Operation plan. Owners shall ensure proper operation to protect the public health, safety, and water quality by establishing practices and developing an operations manual addressing each of the following:

- (a) Physical pool facility components;
- (b) Personnel;
- (c) Users and spectators;
- (d) Environmental conditions.
- (2) **Physical components.** Owners shall provide routine checks of the physical components:
- (a) Ensuring all structural facilities which the users come in contact are intact and free from undue wear or fatigue and replaced as needed;
- (b) Eliminating adverse affects of water ponding on walking surfaces;
- (c) Ensuring preventive maintenance on equipment essential for protection of the public health, safety, and water quality;
- (d) Ensuring any necessary emergency equipment is available and in good repair;
 - (e) Maintaining barrier protection;
- (f) Ensuring common articles such as towels, bathing suits, bathing caps, etc., for patron use are sanitized before reuse if provided for patrons; and
- (g) Ensuring treatment and turnover times are continuous twenty-four hours a day during seasons or periods of use and do not exceed six hours provided:
- (i) Allowances shall be made for minor equipment maintenance;

- (ii) Pools previously approved with turnover rates varying from subsection (2)(g)(i) of this section may continue to operate if water quality conditions conform with WAC 248-98-030.
- (3) Required personnel. Owners shall ensure appropriate personnel at pool facilities as follows:
- (a) General use pool facilities having one or more pools fifteen hundred square feet or more in surface area shall have lifeguards present at all times pools are in use, except:
- (i) Pools having surface area less than twenty-five hundred square feet, four and one-half feet or less in depth, limiting use from two to ten adults in the pool are not required to have a lifeguard;
- (ii) When swim teams are facility users, the owner may allow substitution of qualified coaches. See subsection (5) of this section to substitute for a lifeguard for guarding of a swim team.
- (b) General use pool facilities less than fifteen hundred square feet shall provide lifeguards or attendants as follows:
 - (i) Lifeguards shall be present:
- (A) If pool facility provides training for water safety and basic swimming instruction for children twelve years of age or under; or
- (B) If pool facility provides training for safety and basic swimming instruction for adults and the pool is over four feet deep; or
- (C) When pool facility provides training, practice, and/or meets for swim teams, substitution may occur as described under subsection (3)(a)(ii) of this section.
- (ii) Attendants or lifeguards shall be present when organized programs are provided at the pool facility, for example, teaching of adult swimming lessons in water four feet or less, formal exercise classes, and the like;
- (iii) When no lifeguard or attendant is present, the facility use shall be limited by the following conditions:
- (A) When pool is used by children twelve years of age or under, a responsible adult eighteen years of age or older shall accompany the children and be at the pool or pool deck at all times the children use the facility;
- (B) When used by persons seventeen years of age or under, a minimum of two people at the pool facility at all times the pool is in use;
- (C) Subdivision (b)(iii)(A) and (B) of this subsection posted.
- (c) When lifeguards are not provided at limited use pool facilities, within the conditions noted in the definition for a limited use pool, use of the facility shall be limited by the following conditions:
- (i) When the pool is used by children twelve years of age or under, a responsible adult eighteen years of age or older shall accompany the children and be at the pool or pool deck at all times the children use the facility;
- (ii) When used by persons seventeen years of age or under, a minimum of two people at the pool facility at all times the pool is in use;
- (iii) Subdivision (c)(i) and (ii) of this subsection posted and ongoing provisions to notify the responsible person of conditions for use of the facility.
 - (d) A water treatment operator.

- (4) Personnel duties and equipment. Owners shall ensure the specific duties and equipment of designated personnel include:
- (a) Lifeguards during periods of lifeguarding, guard users of the pool facility in areas assigned;
- (b) Assistant lifeguards when provided at the pool used under the following conditions:
- (i) Fifty percent or more of the persons assigned to guard on the deck are lifeguards;
- (ii) Assistant lifeguards limited to guarding responsibility of areas four feet or less in depth; and
- (iii) One or more lifeguards on duty trained at the equivalent of "lifeguard training" as recognized by the ARC or equivalent as recognized by the department.
- (c) Attendants, when provided at pools not requiring lifeguards, oversee pool use by the bathers and provide supervision and elementary rescues such as reaching assists to bathers in need. This does not mean the person is qualified or trained to make swimming rescues;
- (d) Qualified swimming coaches when substituting for lifeguards, guard swimming team at the pool facility in areas assigned;
- (e) Water treatment operator oversees that the water treatment components are functioning adequately to protect public health, safety, and water quality;
- (f) Notification of responsible persons on the conditions for facility use at pool facilities not requiring lifeguards, and for which no lifeguards or attendants are present. A responsible person means a person having responsibility for overseeing users seventeen years of age or under including, but not limited to a person:
- (i) Renting an apartment, hotel, motel, RV camp site; or
- (ii) Who is an owner or member of a condominium, homeowner's association, mobile home park, or private club with a pool facility.
 - (g) Lifeguards, assistant lifeguards, or attendants:
- (i) Wearing a distinguishing suit, uniform, or emblem; and
 - (ii) Equipped with a whistle or a signaling device.
- (5) **Personnel training.** Owners shall require training for each type of personnel including:
- (a) Lifeguards shall maintain current certificates in the following:
- (i) Standard first aid and adult, single rescue CPR through ARC or the American Heart Association; and
- (ii) Advanced lifesaving, advanced lifesaving review, or lifeguard training through ARC; or
- (iii) YMCA lifeguarding or crossover course through the YMCA; or
- (iv) Lifeguard through the National Lifeguard Service, Canadian; or
- (v) Lifeguard through the National Pool and Waterpark Lifeguard Training Course; or
- (vi) Basic lifeguard through advanced lifeguard training international; or
- (vii) Other training the department determines equivalent; and
- (viii) Thirty-six months after enactment of the personnel training provisions of this chapter, the department will no longer recognize training for lifeguards in

advanced lifesaving or advanced lifesaving review through the ARC.

- (b) Assistant lifeguards shall maintain current certificates and meet the requirements in the following:
- (i) Adult, single rescue CPR through ARC or the American Heart Association; and
 - (ii) Emergency water safety with ARC; or
- (iii) Bronze medallion award through the Royal Lifesaving Society of Canada;
- (iv) Shallow water lifeguard through the National Pool and Waterpark Lifeguard Training; or
- (v) Other training the department determines equivalent; and
 - (vi) Be fourteen years of age or older.
- (c) Swim coaches substituting for lifeguards with swim teams shall maintain current certificates through the following:
- (i) Standard first aid and adult, single rescue CPR through ARC or the American Heart Association; and
 - (ii) Safety training for swim coaches through ARC; or
- (iii) Other training the department determines equivalent.
- (d) Attendant shall maintain current certificates and meet the requirements in the following:
- (i) Adult, single rescue CPR through ARC or the American Heart Association; and
 - (ii) Basic water safety with ARC; or
- (iii) Other training the department determines equivalent; and
 - (iv) Be sixteen years of age or older.
- (e) Water treatment operator shall have specific knowledge in provision of pool water chemistry, filtration, pumping equipment, and rules and regulations pertaining to pool facilities;
- (f) When pool facility is using chlorine gas, an operator shall have specific training as follows:
- (i) Proper operation of the chlorination equipment and routine maintenance procedures;
- (ii) Basic understanding of physical and chemical properties of chlorine gas under pressure;
- (iii) Basic understanding on use of leak detection and emergency safety equipment;
- (iv) Basic knowledge of proper first-aid procedures and response for accidental inhalation of chlorine gas;
- (v) Six hours or more of formal instruction once every three years or three hours or more every eighteen months with certificate of training provided.
- (g) Persons shall be exempt from having current CPR or standard first—aid certificates if the persons hold current certificates in any of the following:
- (i) Community CPR in the place of adult, single rescue CPR;
 - (ii) In the place of standard first aid:
 - (A) Advanced first aid;
 - (B) First responder;
 - (C) Emergency medical technician; or
 - (D) Paramedic.
- (iii) Other training the department recognizes as equivalent or exceeding current requirements.
- (6) Emergency response plan. Owners shall ensure emergency response provisions as follows:

- (a) In pool facilities where lifeguards, assistant lifeguards, or swim coaches are required:
- (i) Sufficient qualified personnel, for example, lifeguards, assistant lifeguards, or swim coaches where appropriate, located to provide a response time not to exceed thirty seconds to all pool users;
 - (ii) Based on, but not limited to, the following:
 - (A) Pool depth;
 - (B) Line of sight;
 - (C) Bather load;
 - (D) Training procedures;
 - (E) Emergency procedures, and
 - (F) Lifeguard rotation.
- (iii) Emergency response drills to meet the response time including:
 - (A) Drills two or more times each year;
 - (B) Testing documentation.
- (iv) Where SCUBA or kayaking lessons are performed at the pool, personnel guarding these activities shall be provided special in-service training.
 - (b) In pool facilities where no lifeguards are provided:
- (i) Posting and ongoing notification and enforcement of conditions for pool use. See subsection (3)(b) and (c) of this section;
- (ii) Enforcement of conditions by owner and authorized personnel;
- (iii) Emergency equipment specified under WAC 248-98-050(31), readily available during operating hours.
- (c) Ongoing training and evaluation of the lifeguarding skills and/or assistant, coach, or attendant skills:
 - (d) In facilities where chlorine gas is used:
 - (i) Annual emergency drills;
- (ii) Identification of the location of accessible chlorine cylinder repair kits.
- (7) Bather use. Owners shall establish rules of conduct for facility users to ensure health and safety as follows:
 - (a) Signage noted under WAC 248-98-050(33);
- (b) Facilities used for swimming instruction courses may allow diving into water depths recognized as adequate by the organization providing the certificates, for example ARC or YMCA, provided the divers are supervised by instructors.
- (8) Environmental conditions. Owners shall monitor various environmental conditions affecting the facility or the user and take appropriate action in response to these factors, including electrical storms, fog, wind, visibility problems, etc.
- (9) Closure. Owners shall close the facility when the facility or portion thereof presents an unhealthful, unsafe, or unsanitary condition. These conditions include lack of compliance with the water quality or operation requirements as detailed under WAC 248–98–030 and 248–98–060.

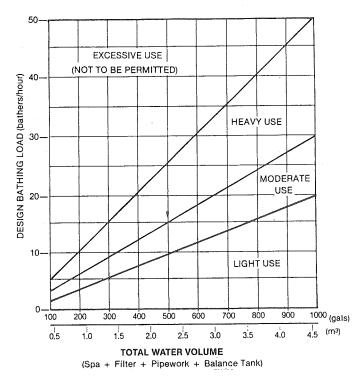
[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–060, filed 3/12/90, effective 4/12/90; Regulation .98.060, effective 3/11/60.]

- WAC 246-260-110 Spa pool general design, construction, and equipment. (1) Location. Owners shall locate pools to:
- (a) Minimize pollution by dust, smoke, soot, and other undesirable substances;
- (b) Eliminate pollution from surrounding surface drainage; and
- (c) Ensure pump house, trees, and other structure locations are fifteen feet or more away from the pool or provide barriers or other means to prevent ready access from any such structure. Structures shall not be construed to include:
- (i) Building walkways above the second story or roofs of any building structure; or
- (ii) Any barriers provided to prevent unauthorized pool access, for example, fencing.
- (2) Materials. Owners shall use only structure and equipment materials which are nontoxic, durable, inert, impervious to water, and easily cleanable.
- (3) Walking surfaces. Owners shall design and maintain walking surfaces:
- (a) Uniformly sloping away from the pool or pools with a minimum of one-fourth inch per foot and a maximum of one-half inch per foot;
- (b) Of a nonslip finish not presenting a tripping hazard;
- (c) Equipped with sufficient drains to prevent standing water;
 - (d) Of easily cleanable impervious finishes;
- (e) Providing a minimum unobstructed six feet by seven feet area adjacent to the pool;
- (f) Continuous and four feet wide or more extending around the entire pool if perimeter is equal to or greater than forty feet;
- (g) Forty inches or less below horizontal ledge of elevated pool. Elevated pools over twelve inches above deck level shall have a maximum ledge thickness of twelve inches, except in the area of stairs;
- (h) Continuously extending, and four feet wide or more, around fifty percent or more of the pool, if the pool is over forty inches above the primary walkway; and
- (i) In conformance with department-established guidelines for any resilient artificial surfaces.
- (4) Barriers. Owners shall provide barrier protection to prevent unauthorized access including:
- (a) In outdoor facilities, a barrier of sixty inches or more in height with:
 - (i) Barrier:
- (A) Not allowing passage of a four-inch diameter sphere;
- (B) Horizontal members with less than forty-five inches spacing between the tops of the horizontal members shall have vertical members not exceeding one and three quarter inches in width; or
- (C) Horizontal members with forty-five inches or more spacing between tops of the horizontal members shall have vertical members not exceeding four inches in width.
- (ii) Lockable gates and entrances provided with a self-closing, self-latching mechanism fifty-four inches or more from the ground with a clear space fifty inches

- deep on the latch side of the door to position a wheelchair. When a latching mechanism is provided at any lower height, the latching mechanism shall be of a type remaining continuously locked, and only opening with the use of a key or other access control system.
- (b) Indoor facility barriers sixty inches or more in height suitable to prevent access of unauthorized individuals;
- (c) Restricted area service entrances shall be exempt from door or gate requirements providing no public access is available;
- (d) Lifeguarded pools are not required to have a self-closing, self-latching gate during the period a pool is in use. Facility gates shall be closed and locked during non-use periods; and
- (e) An entrance to the pool area which shall not serve as a required exit from another part of a building when there is a conflict with other codes or regulations.
- (5) **Spa pool structure.** Owners shall ensure general pool requirements include:
- (a) Pool surfaces which are nontoxic, impervious, smooth, easily cleanable, and enduring. Pools one hundred square feet or more shall be a white or light color;
- (b) A dimensional design providing for safety, circulation, and quality of the water including, but not be limited to:
- (i) Surfaces not causing cutting, pinching, puncturing, entanglement, or an abrasion hazard under casual contact:
- (ii) Construction tolerances conforming with current NSPI public spa standards;
- (iii) Uniform floor slopes not exceeding one foot of drop in twelve feet of run sloped to drain;
- (iv) A minimum height between the top of the pool rim and the ceiling shall be seven feet; and
- (v) Maximum operational depth of four feet measured from the water line. Exceptions may be made for special purpose designed pools.
- (c) Adequate means to routinely drain or otherwise remove water from the pool.
- (6) Spa pool appurtenances. Owners shall ensure pools contain:
- (a) Handholds around the pool perimeter two feet or more in depth. Handholds shall be four feet apart or less and consist of any one or a combination of the following:
- (i) Coping, ledges, radius flanges, or decks along the immediate top edge of the pool or suitable slip—resisting handholds located twelve inches or less above the water line;
 - (ii) Ladders or steps; or
- (iii) Secured rope or railing twelve inches or less above the water line.
 - (b) Stairs:
 - (i) Meeting the following construction requirements:
 - (A) Nonslip tread finishes;
- (B) Contrasting color stair tread edges clearly visible to users;
- (C) Handrails with the leading edge for stairs at pool entry/exit being neither eighteen inches or more beyond nor eight inches or more inside (horizontally) the vertical plane of the bottom riser;

- (D) Less than or equal to twenty feet of any point within the spa measured at the wall at the point of entry;
- (E) Riser treads with a minimum unobstructed, horizontal, ten-inch tread depth and a minimum two-hundred-forty-inch surface area;
- (F) Riser heights on spa pools over forty feet in perimeter, uniform and seven and one-half inches or less, except the bottom riser may be less than uniform height; and
- (G) Riser heights on spa pools of forty feet or less in perimeter, uniform and have a preferred seven and one-half inch height, but not greater than ten inches, except the bottom riser may be less than uniform height.
- (7) Spa pool bather design capacity and load. Owners shall design and control the pool use to not exceed a maximum bather capacity and load as designated below:
- (a) The maximum bather capacity is one person per four square feet. Maximum bather capacity is the maximum number of bathers at any one time; and
- (b) Bather loads are designated in terms of three different loading conditions: Light, moderate, and heavy use as shown under Graph 040.1. Maximum bather load is the maximum number of bathers in a one-hour period. Interpret a single bather use to mean a bather using the pool for a fifteen minute duration. For pools with volumes greater than noted on the graph, loadings shall be based on the continued slope of the line above each use category.

GRAPH 040.1 SPA DESIGN FOR BATHER LOAD AND TURNOVER



(8) Turnover. Owners shall ensure pools turn over entire pool water volume at rates in accordance with designated bather load as determined from Graph 040.1 noted in subsection (7) of this section.

- (a) Minimum turnover time for treatment recirculation shall be:
 - (i) For light use pool facilities, thirty minutes;
 - (ii) For moderate use pool facilities, twenty minutes;
 - (iii) For heavy use pool facilities, ten minutes.
- (b) Exceptions to recirculation requirements may be made for flow-through pools in the following conditions:
- (i) Where water supply is sufficient to provide the same turnover period specified for recirculation pools;
- (ii) The source water supply meets the quality requirements and is subject to a disinfection method outlined under WAC 248-98-030(3);
- (iii) The introduction of fresh treated pool water is accomplished by the same type of inlet and outlet design required for recirculation pools; and
- (iv) The pool water quality complies with WAC 248-98-030.
 - (9) Inlets. Owners shall provide pool inlets:
- (a) Submerged and located to produce uniform water and chemical circulation throughout the pool;
- (b) Located on the bottom of pools ten thousand gallons or more, unless otherwise justified by the design engineer to either the department's or local health officer's satisfaction.
 - (10) Outlets. Owners shall provide pool outlets with:
- (a) Overflow and main drain grating systems each designed to carry one hundred percent of the total recirculation filter flow, and main drain piping designed to carry fifty percent or more of the total recirculation filter flow;
 - (b) Overflow outlets maintaining:
- (i) A minimum of sixty percent of filter recirculation flow at all times; and
- (ii) An overflow channel which may be used on any pool and required on pools ten thousand gallons or more on the pool perimeter to promote uniform circulation and skimming action of the upper water layer with:
- (A) A design preventing all matter entering the channel from returning to the pool;
- (B) Dimensions minimizing bather hazards, such as catching arms or feet;
- (C) One one-hundredth of a foot slope per foot or more:
- (D) Drains sufficiently spaced and sized to collect and remove overflow water to return line and filter, where applicable; and
- (E) Size sufficient to prevent flooded suction conditions on the overflow system and to properly drain water away from the pool. Displacement shall be computed at twenty gallons per bather. Balancing tanks use is optional dependent on the overflow channel volume and design.
- (iii) Skimmers in lieu of pool overflow channels up to ten thousand gallons if:
- (A) Weir provided in skimmer has a maximum flow rate through skimmer not exceeding four gpm per inch of weir;
- (B) Devices are recessed in the pool wall so no part protrudes beyond the plane of the wall into the pool;

- (C) The skimmer is equipped with a device to prevent air lock in the recirculation suction line, such as, an equalizer line;
- (D) The skimmer is equipped with a removable and cleanable screen designed to trap large solids;
- (E) Automatically adjustable and operates freely with continuous skimming action to continue through all loading rates as the skimmer is designed. Displacement shall be computed at twenty gallons per bather.
 - (c) Main drains in all pools with:
- (i) Location of one main drain or more at the lowest point of the pool floor, or means to readily drain the entire pool water readily available;
- (ii) A minimum of two main drains with equivalent recirculation capacity and net surface open area; or on spa pools with fifteen hundred gallon volume or less, a large single main drain twelve inches square or more in surface area;
- (iii) A design to aid in hair entrapment prevention when main drains are on vertical walls;
- (iv) Total open area of grates sized to prevent a suction or entrapment hazard dangerous to user;
 - (v) Grates on drains with a:
- (A) Maximum flow of one and one-half feet per second; or
- (B) Net outlet area four times or more the area of the discharge pipe;
 - (vi) Openings one-half inch or less wide;
 - (vii) Grates designed to withstand forces of users;
 - (viii) Grates removable only with specific tools; and
- (ix) Means to control flow from recirculation pump or balancing tank.
- (11) Flow. Owners shall maintain pool recirculation flow not to exceed:
- (a) Six feet per second in the valved suction or discharge side of the pump; and
- (b) Ten feet per second in open discharge pipes on the pressure side of the pump or filter discharge. The recirculation flow limit does not apply to the return inlet and the last two feet of pipe leading to the inlet.
- (c) The recirculation piping of the spa pool shall not inter-mix back with any companion swimming pool water.
- (12) **Pumps.** Owners shall have and maintain recirculation pumps with adequate capacity to:
- (a) Provide design flows and pressure for water recirculation over the entire operating filter pressure;
- (b) Allow proper backwashing of filters when specified;
- (c) Have self-priming capability when installed above the pool water level; and
- (d) Ensure the recirculation pump system shall have a separate water treatment pump than that used for hydrotherapy spa action, unless automatic flow control valving is provided to limit filter flow to required design.
- (13) **Strainers.** Where pumps precede the filter, owners shall equip pool recirculation facilities with hair and lint strainers which shall:
 - (a) Be located upstream of recirculation pumps;
- (b) Provide strainer screen sufficiently strong to prevent collapse when clogged;

- (c) Have an operable cover; and
- (d) Provide valving to isolate the strainer when located below pool water level.
- (14) Valves. Owners shall provide valves at appropriate locations to allow equipment isolation and maintenance.
- (15) Equipment rooms. Owners shall provide equipment rooms for a spa pool with:
- (a) Ten thousand gallons or more in water volume or for spa pools provided adjacent to a swimming pool at the same facility with:
- (i) Enclosed pumps, disinfection equipment, filters, and other electrical and mechanical feed equipment and associated chemicals. Storage of chemicals shall conform to manufacturer requirements;
- (ii) Working space and access to perform routine operation;
- (iii) A forty-six-square-foot minimum floor area and provides a three-foot minimum access area to service equipment;
- (iv) One floor drain or more and a floor slope to the drain at a one-fourth-inch-per-foot minimum;
 - (v) If below grade, ready access;
 - (vi) Ventilation;
- (vii) Twenty foot candles or more of light measured thirty inches from the floor; and
 - (viii) Kept locked.
- (b) Less than ten thousand gallons in water volume or for spa pools not provided at the same facility as a swimming pool complying with subsection (15)(a)(i), (ii), (v), and (viii) of this section.
- (16) Make-up water. Owners shall ensure a source of make-up water and associated piping at the pool:
- (a) Providing sufficient quantity to replace daily pool water losses;
- (b) Coming from a supply conforming with chapter 248-54 WAC;
- (c) Preventing cross connections using a minimum air gap of two pipe diameters or approved backflow prevention devices between the make—up water source and the pool water or waste water; and
- (d) If using a pool fill spout, not projecting greater than one inch into the space above the water surface area and shielded to not create a deck hazard.
- (17) Filters. Owners shall equip pools with filtration equipment:
- (a) Meeting the applicable NSF standards or equivalent;
- (b) Using acceptable type and filter rates described under Table 040.2 of this section;
- (c) Having pressure or vacuum gauges for measuring loss of head through the filter with a minimum of one gauge preceding and one gauge following the filter;
- (d) Having a rate of flow indicator to measure a flow with accuracy, repeatability, and durability equivalent to flow meters meeting NSF standards; and
- (e) Having means of discharging filter backwash to waste with:
- (i) Discharge in a manner not creating a public nuisance;

- (ii) Disposal in accordance with applicable local laws or regulations;
- (iii) Minimum air gap of two pipe diameters to prevent cross—connection from waste discharge and recirculation system piping;
- (iv) Discharge receptor and sufficient size piping to accept backwash water and to prevent flooding; and
- (v) Ability to monitor filter effluent during backwash, that is, use of sight glass.
- (f) Providing means to release air entering the filter tank on pressure filters;
 - (g) When cartridge filters are used:
 - (i) Provide with an extra set of cartridges; and
- (ii) Have any bypass valves in a permanently closed position.
- (h) When using pressure DE filters with separation tanks:
- (i) Providing a means of air release or a lid providing a slow and safe release of pressure; and
- (ii) Showing a readily visible user warning that the air release must be opened before starting the circulation pump.

TABLE 040.2 SPA POOL FILTER RATE APPLICATION RATES

Type of Filter Media	Rates i	Rates in gpm/Square Feet					
Sand	Minin	num	Maximum				
Rapid Sand or Pressure San High Rate Sand Pressure	nd -	_	3				
or Vacuum	. 1	15					
	Continuous Feed	Manual Feed					
DE							
Pressure	0.8	1.0	1.5				
Vacuum	1.0	1.35	1.5				
Cartridge*			.375				

NOTE:

- *Cartridge filters shall have a nominal micron rating of twenty mi-
- (18) **Disinfection equipment.** Owners shall provide disinfection equipment:
- (a) Providing a continuous and effective disinfectant residual in the water;
- (b) Using a disinfectant with an easily monitored residual;
- (c) Having a design feed rate providing effective disinfection levels when the pool is in peak demand conditions;
- (d) Having easily cleanable equipment and piping used to apply chemicals and with provisions to prevent undue clogging. All materials shall be resistant to action of chemicals used;
- (e) Conforming to NSF standards if the disinfection equipment contains:
- (i) Adjustable output rate chemical feed equipment for liquid solutions. The equipment shall:
- (A) Feed under positive pressure in the recirculation system;
 - (B) Provide means for dosage adjustment;
- (C) Have provisions to prevent hypochlorite solution siphoning when equipment is turned off. This applies

- when the disinfection equipment is above pool water level.
- (ii) Flow through chemical feed for solid feed materials. Solid tablets or granules shall not be placed in skimmer baskets accessible to the public.
- (f) Allowing hand feeding on an emergency basis only;
- (g) Meeting the following conditions when using chlorine gas:
 - (i) Chlorine rooms shall:
 - (A) Be above ground level;
- (B) Be constructed so all openings or partitions with adjoining rooms are sealed;
- (C) Be located with consideration of prevailing winds to dissipate leaked chlorine away from the pool facility;
- (D) Have door opening outward only and to the out-of-doors; and
- (E) Provide a sign on the door exterior reading DANGER CHLORINE. The sign shall be large enough to be read twenty-five feet away.
- (ii) Chlorine rooms shall have mechanical exhausting ventilation including:
- (A) Air inlet located as far as possible from fan intake to promote good air circulation patterns;
- (B) Minimum of one air change per minute in the chlorine room when fan is operating;
- (C) A remote switch outside the room or a door-activated switch to turn on fan before entering;
 - (D) Suction for fan near the floor;
- (E) Exhaust for fan and chlorinator vent located to prevent contaminating air intake and prevent undue hazard for pool facility users; and
 - (F) Screened chlorinator vent.
 - (iii) Gas chlorine systems shall:
- (A) Be vacuum injection type, with vacuum actuated cylinder regulators;
- (B) Provide integral backflow and anti-siphon protection at the injector;
- (C) Provide taring (net weight of cylinder gas) scales to determine chlorine weight.
- (iv) Breathing protection available in an accessible area for the operator outside of the chlorine room including:
- (A) Self-contained breathing apparatus designed for use in a chlorine atmosphere for working with chlorine leaks and maintained in accordance with department of labor and industries standards; or
- (B) Provisions to substitute breathing protection at the site, if procedures can be established and documented with emergency service fire districts or other approved organization within the area for promptly responding to chlorine leaks.
- (v) Means for automatic shutoff when pool flow is interrupted;
 - (vi) Chlorine gas cylinders shall:
 - (A) Be stored only in chlorine rooms;
- (B) Have approved valve—stem cylinder wrench on the valve stem to shut the system down in an emergency event;
 - (C) Be properly secured to prevent tipping;

- (D) Be tagged to indicate cylinders are empty or full; and
- (E) Not exceed one hundred fifty pounds tare weight per cylinder. If one—ton cylinder use is desired, an engineer specializing in chlorine design shall prepare a design proposal for department consideration.
- (19) Chemical feeding equipment for pH control. Owners applying chemicals for controlling pH through chemical feed equipment shall provide equipment with:
- (a) Adequate size and design to allow routine cleaning and maintenance;
 - (b) Materials resistant to chemical action;
- (c) Means for automatic shut off when pool flow is interrupted;
- (d) Chemical feed equipment for pH control on pools ten thousand gallons or greater;
 - (e) Any pool feeding with:
 - (i) Caustic soda (NaOH);
 - (ii) Carbon dioxide (CO₂); or
- (iii) Other chemicals the department determines necessary to require metered and controlled feeding.
- (20) **Heaters.** Where pool heating equipment is provided, owners shall:
- (a) Locate equipment so any standing pilot is readily accessible;
 - (b) Install equipment per NEC and UMC.
- (21) Ventilation. Owners shall provide indoor pool facility ventilation conforming with ASHRAE pool facility standards.
- (22) **Testing equipment.** Owners shall use testing equipment as noted in the water quality section under WAC 248-98-030(6).
- (23) Chemical storage. Owners shall ensure chemical storage design and placement minimizes safety risks.
- (24) Restroom and plumbing fixtures. Owners shall provide restrooms and plumbing facilities at pools as follows:
- (a) In the spa pool facilities provided in conjunction with general use and limited use swimming pools, wading pools, or other water recreation facilities, the spa pool bathing load shall be added to the total load for consideration of plumbing fixture units;
- (b) If a spa pool is the sole water recreation facility at a site, plumbing fixtures, as noted under Table 040.3, including:
 - (i) Flush toilets and toilet tissue in dispensers;
 - (ii) Shower facilities that:
- (A) Deliver water at a temperature range of ninety to one hundred ten degrees Fahrenheit; and
 - (B) Provide single service soap in nonglass dispensers.
 - (iii) Sinks provided with:
 - (A) Tempered or hot and cold running water;
 - (B) Single service soap in nonglass dispensers; and
 - (C) Single service towels or electric hand dryer.
- (iv) Hose bibs with vacuum breakers conveniently accessible to pool and within one hundred feet; and
- (v) Sewage disposed in a manner approved by the department or local health officer.

(c) If owners limit the number of people within their facility to a certain number and post maximum occupancy loading, the number of plumbing fixtures may be based on the maximum occupancy.

TABLE 040.3

PLUMBING FIXTURE MINIMUM REQUIREMENTS FOR SOLE FACILITY SPA POOLS

		Minimum Number of Fixture Units Dress-						
Spa 1	Pools With:	Toilet	Shower	Sink	ing Room	Hose Bib		
1.	Limited spa use with living units* within 100 feet and less than 3 stories		_	_		1		
2.	Limited spa use with living units > 100 ft. and < 500 ft. and < three stories**			l	. =	1		
3.	Limited spa use with living units > 500 ft. and < 1/4 mi. and/or > three stories**	1(M) 1(F)	1(M) 1(F)	1(M 1(F)		1 -		
4.	Limited spa use with living units > 1/4 mile or general use spa pool***	1(M) 1(F)	1(M) 1(F)	1(M 1(F)	1 (M) 1 (F)	1 -		

NOTE:

- *"Living unit" means all the units the facility serves.
- **Consideration for elevators adjacent to pool may allow variance from this requirement.
- ***When bathing load exceeds 40 of either sex, the fixture units provided shall conform to general use requirements for swimming pools.
- (25) Lighting. Owners shall design and maintain pool facility lighting to:
- (a) Illuminate indoor facilities, outdoor facilities used after dusk, and locker room facilities with a minimum lighting intensity maintained thirty inches above any walking surface, pool deck, or pool area of:
 - (i) Thirty foot candles at indoor facilities;
 - (ii) Fifteen foot candles at outdoor facilities; and
 - (iii) Twenty foot candles in locker rooms.
- (b) Allow lifeguards or attendants to clearly see pool areas and walking surfaces;
- (c) Meet any additional lighting requirements deemed necessary by the department or local health officer;
- (d) Provide protective shielding for all lighting fixtures above walking surfaces and pool areas; and
- (e) Provide all indoor facilities with one or more poolarea emergency lights designed to turn on in the event of a power failure. The emergency lighting shall conform to requirements of UL standard 924.
- (26) Emergency equipment. Owners shall provide first aid and emergency equipment readily available during operating hours as follows:
- (a) Spa pool facilities ten thousand gallons or more or used in conjunction with a general use swimming pool:
- (i) A telephone within the facility with a prominently displayed list of emergency medical service response numbers;

- (ii) Sufficient and suitable area provided to accommodate persons within the facility requiring first aid treatment and necessary first aid equipment;
 - (iii) A standard sixteen unit first aid kit;
 - (iv) Two or more blankets reserved for emergency use;
- (v) A clearly marked emergency shut off switch for shutting off all pumps, accessible to the public within twenty feet of the pool. Spa pool facilities shall also provide an audible alarm with the emergency shut off switch; and
- (vi) Heater thermostat switches shall be inaccessible to bathers.
- (b) Spa facilities containing less than ten thousand gallons:
- (i) During the period the facility is open for use, one of the following is required:
 - (A) Telephone within one minute access;
- (B) Alternate means of reaching emergency medical service response numbers; or
- (C) Provision of an audible emergency alarm to alert others at the area of need to respond.
- (ii) Comply with subsections (26)(a)(iii), (iv), (v), and (vi) of this section.
- (27) Signs. Owners shall provide signs at pools which must convey the following conditions, but may be conveyed by any combination of words, pictures, or symbols:
 - (a) Prohibition of running or horseplay;
- (b) Prohibition of use by persons with communicable diseases:
- (c) Prohibition of use by persons under the influence of alcohol or drugs;
- (d) Requirement for a cleansing shower before pool entry;
- (e) Caution that persons suffering from heart disease, diabetes, or high blood pressure should consult a physician before spa pool use;
- (f) Caution for women who are or may be pregnant to seek the advice of a physician regarding spa use and to limit the women's time in the pool;
- (g) Persons should limit the stay in the pool to fifteen minutes at any one session;
- (h) All children twelve years of age or under shall be accompanied by a responsible adult observer. No child six years of age or under should use the pool;
- (i) No person seventeen years of age or under shall use the pool alone;
 - (j) Maximum bathing capacity of pool shall be posted;
 - (k) Prohibition of food or drink in the pool water;
- (1) In pools where lifeguards or attendants are not present, post requirements for facility use as described under WAC 248-98-045(3); and
- (m) Location of the nearest telephone or emergency notification procedure.
- (28) **Food service.** When owners allow or make provisions for food service:
- (a) At general use pool facilities, ensure food and beverage sale and consumption areas are separated from pool and deck. Special provisions may allow food and beverage service on the walkway provided a minimum six feet clear area is maintained between the pool and

- any tables or chairs provided for food service for special facility functions;
- (b) At limited use spa pool facilities, prohibit food and beverage in the pool water and maintain a minimum four foot clear area between pool edge and any tables and chairs provided for food service;
- (c) At general use pool facilities, prohibit alcoholic beverages;
- (d) At limited use pool facilities, when alcohol is sold within the pool facility, provide an attendant at the pool area:
 - (e) Provide trash containers; and
 - (f) Prohibit glass containers in the pool facilities.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–040, filed 3/12/90, effective 4/12/90; Regulation .98.040, effective 3/11/60.]

- WAC 246-260-120 Operation—Spa pools. (1) Operation plan. Owners shall ensure proper operation to protect the public health, safety, and water quality by establishing practices and developing an operations manual addressing each of the following:
 - (a) Physical pool facility components;
 - (b) Personnel;
 - (c) Users and spectators; and
 - (d) Environmental conditions.
- (2) **Physical components.** Owners shall provide routine checks of the physical components:
- (a) Ensuring all structural facilities which the users come in contact are intact and free from undue wear or fatigue and replaced as needed;
- (b) Eliminating adverse affects of water ponding on walking surfaces;
- (c) Ensuring preventive maintenance on equipment essential for protection of the public health, safety, and water quality;
- (d) Ensuring any necessary emergency equipment is available and in good repair;
- (e) Having means for routine oxidation of spa pool water provided after heavy use, for example, super chlorination:
 - (f) Maintaining barrier protection;
- (g) Ensuring common articles such as towels, bathing suits, bathing caps, etc., for patron use shall be sanitized before re—use if provided for patrons; and
- (h) Ensuring a continuous twenty-four-hour-a-day treatment and turnover during periods of use not exceeding:
 - (i) Thirty minutes in lightly loaded spas; or
 - (ii) Twenty minutes in moderately loaded spas; or
 - (iii) Ten minutes in heavily loaded spas.
- (iv) Turnover rates designated in subsection (2) of this section, except allowance shall be made for minor equipment maintenance and existing pools with turnover rates varying from this section may continue to operate if water quality conditions conform with WAC 248-90-030.
- (3) Required personnel. Owners shall ensure appropriate personnel at pool facilities as follows:

- (a) A lifeguard or attendant. If no lifeguard or attendant is present, pool facility use shall be subject to the following conditions:
- (i) When pool is used by children twelve years of age or under, a responsible adult eighteen years of age or older shall accompany the children and be at the pool or the pool deck at all times the children use the facility;
- (ii) When used by persons seventeen years of age or under, a minimum of two people at the pool facility at all times the pool is in use;
- (iii) At general use pools, subdivision (a)(i) and (ii) of this subsection be posted; and
- (iv) At limited use pools, subdivision (a)(i) and (ii) of this subsection be posted and ongoing provisions notifying the responsible person of the conditions.
 - (b) A water treatment operator.
- (4) Personnel duties and equipment. Owners shall ensure the specific duties and equipment of designated personnel include:
- (a) Lifeguards, during periods of lifeguarding, guard users of the pool facility in areas assigned;
- (b) Assistant lifeguards when provided at the pool used under the following conditions:
- (i) Assistant lifeguard limited to guarding responsibility of areas four feet or less in depth; and
- (ii) A lifeguard overseeing the activities of the assistant lifeguard;
- (c) Attendants, when provided, at pools not requiring lifeguards oversee use of the pool by bathers and provide supervision and elementary rescues such as reaching assists to bathers in need:
- (d) Water treatment operator oversees that the water treatment components are adequately functioning to protect public health, safety, and water quality;
- (e) Notification of responsible persons on the conditions for facility use at pool facilities not requiring lifeguards, and where no lifeguards or attendants are present. A responsible person means a person having responsibility for overseeing users seventeen years of age or under, including but not limited to a person:
- (i) Renting an apartment, hotel, motel, RV camp site; or
- (ii) Who is an owner or member of a condominium, home owner's association, mobile home park, or private club with a pool facility.
 - (f) Lifeguards, assistant lifeguards, or attendants:
 - (i) Wear distinguishing suit, uniform, or emblem; and
 - (ii) Equipped with a whistle or a signaling device.
- (5) **Personnel training.** Owners shall require training for each type of personnel including:
- (a) Lifeguards shall maintain current certificates in the following:
- (i) Standard first aid and adult, single rescue CPR through ARC or American Heart Association; and
- (ii) Advanced lifesaving, advanced lifesaving review, or lifeguard training through ARC; or
- (iii) YMCA lifeguarding or crossover course through the YMCA; or
- (iv) Lifeguard through the National Lifeguard Service, Canada; or

- (v) Lifeguard through the National Pool and Waterpark Lifeguard Training; or
- (vi) Basic lifeguard through advanced lifeguard training international; or
- (vii) Other training the department determines equivalent; and
- (viii) Thirty-six months after enactment of personnel training provisions of this chapter, the department shall no longer recognize training for lifeguards in advanced lifesaving or advanced lifesaving review through the ARC.
- (b) Assistant lifeguards shall maintain current certificates and meet the requirements in the following:
- (i) Adult, single rescue CPR through ARC or American Heart Association; and
 - (ii) Emergency water safety with ARC; or
- (iii) Bronze medallion award through the Royal Lifesaving Society of Canada; or
- (iv) Shallow water lifeguard through the National Pool and Waterpark Lifeguard Training; or
- (v) Other training the department determines equivalent; and
 - (vi) Be fourteen years of age or older.
- (c) Attendant shall maintain current certificates and meet the requirements in the following:
- (i) Adult, single rescue CPR through ARC or American Heart Association; and
 - (ii) Basic water safety with ARC; or
 - (iii) Lifesaver with YMCA; or
- (iv) Bronze medallion award through the Royal Lifesaving Society of Canada; or
- (v) Other training the department determines equivalent; and
 - (vi) Be sixteen years of age or older.
- (d) Water treatment operator shall have specific knowledge in the provision of pool water chemistry, filtration, pumping equipment, and rules and regulations pertaining to pool facilities;
- (e) When the pool facility is using chlorine gas, an operator shall have specific training as follows:
- (i) Proper operation of the chlorination equipment and routine maintenance procedures;
- (ii) Basic understanding of physical and chemical properties of chlorine gas under pressure;
- (iii) Basic understanding on use of leak detection and emergency safety equipment;
- (iv) Basic knowledge of proper first aid procedures and response for accidental chlorine gas inhalation; and
- (v) Six hours or more of formal instruction once every three years or three hours or more every eighteen months with certificate of training provided.
- (f) Persons shall be exempt from having a current CPR or standard first aid certificate if the person holds a current certificate in any of the following:
- (i) Community CPR, in place of adult, single rescue CPR;
 - (ii) In place of standard first aid:
 - (A) Advanced first aid;
 - (B) First responder;
 - (C) Emergency medical technician; or
 - (D) Paramedic.

- (iii) Other training the department recognizes as equivalent or exceeding current requirements.
- (6) Emergency response plan. Owners shall ensure emergency response provisions as follows:
- (a) In pool facilities where lifeguards or assistant lifeguards are provided:
- (i) Lifeguard, or assistant lifeguard where provided, is located to provide a response time not to exceed thirty seconds to all pool users;
 - (ii) Based on, but not limited to, the following:
 - (A) Pool depth;
 - (B) Line of sight;
 - (C) Bather load;
 - (D) Training procedures;
 - (E) Emergency procedures; and
 - (F) Lifeguard rotation.
- (iii) Emergency response drills to meet the response time including:
 - (A) Drills two or more times each year;
 - (B) Testing documentation.
- (b) In pool facilities where no lifeguard or assistant is provided:
- (i) Posting and ongoing notification and enforcement of conditions of pool use described under subsection (3) of this section;
- (ii) Enforcement of conditions by owner and authorized personnel;
- (iii) Emergency equipment specified under WAC 248-98-040(26) readily available during operating hours.
 - (c) In pool facilities where chlorine gas is used:
 - (i) Annual emergency drills; and
- (ii) Identification of the location of accessible chlorine cylinder repair kits.
- (7) Bather use. Owners shall establish rules of conduct for facility users to ensure health and safety. The rules shall include signage noted under WAC 248-98-040(27) of this chapter.
- (8) Environmental conditions. Owners shall monitor various environmental conditions affecting the facility or the user and take appropriate action in response to these factors, including electrical storms, fog, wind, visibility problems, etc.
- (9) Closure. Owners shall close the facility when the facility or portion thereof presents an unhealthful, unsafe, or unsanitary condition. These conditions would include lack of compliance with the water quality or operation requirements as detailed under WAC 248-98-030 and 248-98-045.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-260-120, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90-07-010 (Order 042), § 248-98-045, filed 3/12/90, effective 4/12/90.]

WAC 246-260-130 Wading pools. (1) Location. Owners shall locate pools to:

- (a) Minimize pollution by dust, smoke, soot, and other undesirable substances;
- (b) Eliminate pollution from surrounding surface drainage; and

- (c) Ensure pump house, trees, and other structures are located fifteen feet or more from the pool or provide barriers or other means to prevent ready access from the structures. Structure shall not be construed to include:
- (i) Building walkways above the second story or roofs of any building structure; or
- (ii) Any barriers provided to prevent unauthorized pool access, for example, fencing.
- (2) Materials. Owners shall use only structure and equipment materials which are nontoxic, durable, inert, impervious to water, and easily cleanable.
- (3) Walking surfaces. Owners shall design and maintain pool walking surfaces:
- (a) Uniformly sloping away from the pool or pools a minimum of one-fourth inch per foot and a maximum of one-half inch per foot;
- (b) Of a nonslip finish not presenting a tripping hazard;
- (c) Equipped with sufficient drains to prevent standing water;
 - (d) Of easily cleanable, impervious finishes;
 - (e) Four feet or more in width;
- (f) At facilities with swimming pools fifteen hundred square feet or more associated with the wading pool, provide a minimum of sixteen square feet per bather; and
- (g) In conformance with department-established guidelines for any resilient artificial surface.
- (4) Barriers. Owners shall provide barrier protection to prevent unauthorized access including:
- (a) In outdoor facilities, a barrier of sixty inches or more in height with:
 - (i) Barrier:
- (A) Not allowing passage of a four-inch diameter sphere;
- (B) Horizontal members with less than forty-five inches spacing between the tops of the horizontal members shall have vertical members not exceeding one and three-quarters inches in width;
- (C) Horizontal members with forty-five inches or more spacing between tops of horizontal members shall have vertical members not exceeding four inches in width.
- (ii) Lockable gates and entrances provided with a self-closing, self-latching mechanism fifty-four inches or more from the ground with a clear space fifty inches deep on the latch side of the door to position a wheel-chair. When a latching mechanism is provided at any lower height, the latching mechanism shall be of a type remaining continuously locked, and only opening with the use of a key or other access control system.
- (b) Indoor facility barriers sixty inches or more in height, suitable to prevent access of unauthorized individuals;
- (c) Restricted area service entrances shall be exempt from door or gate requirements providing no public access is available:
- (d) Lifeguarded pools are not required to have a selfclosing, self-latching gate during the period a pool is in use. Facility gates shall be closed and locked during non-use periods; and

- (e) An entrance to the pool area which shall not serve as a required exit from another part of a building when there is a conflict with other codes or regulations.
- (5) **Pool surfaces.** Owners shall ensure pool surfaces with:
- (a) Materials complying with subsection (2) of this section:
 - (b) Water tight and nonabrasive construction;
- (c) White or light color finish not obscuring the view of objects or surfaces;
- (d) Surfaces not causing cutting, pinching, puncturing, entanglement, or abrasion hazard under casual contact; and
- (e) Construction tolerances conforming with current NSPI public pool standards.
- (6) Wading pool floor and wall dimensional design. Owners shall ensure pool dimensional designs for floors and walls provide for safety, circulation, and water quality including, but not limited to:
- (a) All corners formed by intersection of walls with floor shall be coved;
- (b) Uniform pool floor slopes not exceeding one foot of drop in twelve feet of run.
- (7) Wading pool entry and exit. Owners shall provide means of entry and exit on all pools including one of the following:
- (a) Stairs when provided meeting the following construction requirements:
 - (i) Nonslip tread finish;
- (ii) Contrasting color stair tread edges clearly visible to users:
- (iii) Handrails with the leading edge for stairs at entry/exit being neither eighteen inches or more beyond nor eight inches or more inside (horizontally) the vertical plane of the bottom riser;
- (iv) Riser treads with a minimum unobstructed, horizontal, ten-inch tread depth and minimum two-hundred-forty-inch surface area;
- (v) Riser height uniform and seven and one-half inches or less, except last step leading into pool may be less than uniform height.
- (b) Shallow pool entry seven and one-half inches or less in depth;
- (c) Ramp entry into the pool meeting the following construction requirements:
- (i) Handrail extending over the deck edge and extending to the bottom of the ramp for entering and leaving the wading pool;
- (ii) Ramp edges protruding into the pool of contrasting color;
 - (iii) Ramp slope not to exceed one foot in seven feet.
- (d) Designs permitting entry and exit for impaired or handicapped persons are encouraged.
- (8) **Turnover.** Owners shall ensure pools turn over entire pool water volume in three hours or less and:
- (a) Where wading pools are recirculated jointly with swimming pools, means to ensure efficient turnover and treatment are maintained;
- (b) Exceptions to recirculation requirements may be made for flow through pools in the following conditions:

- (i) Where water supply is sufficient to provide the same turnover period specified for recirculation pools;
- (ii) The water supply source meets the quality requirements and is subject to a disinfection method as outlined under WAC 248-98-030(3);
- (iii) The introduction of fresh treated pool water is accomplished by the same type of inlet and outlet design required for recirculation pools; and
- (iv) The pool water quality complies with WAC 248-98-030.
- (9) **Pool depth markings.** Owners shall provide depth markings:
- (a) Plainly marking the water depth in feet on the horizontal surface of the coping or deck edge;
- (b) Located on the coping or deck within eighteen inches of the water edge and positioned to be read while standing on the deck facing the water;
 - (c) Which are slip resistant;
- (d) Placed at the maximum and minimum water depths;
 - (e) Spaced at intervals not exceeding twenty-five feet;
- (f) Uniformly arranged on both sides and ends of the pool; and
 - (g) With a four inch minimum height.
- (10) Bather load. Owners shall ensure maximum number of bathers permitted in the wading pool facility at any one time not exceed one bather per seven square feet.
 - (11) Inlets. Owners shall provide pool inlets:
- (a) Submerged and located to produce uniform water and chemical circulation throughout the pool; and
- (b) Located on the bottom of pools twenty—five hundred square feet or more, unless otherwise justified by the design engineer to the department's or local health officer's satisfaction.
 - (12) Outlets. Owners shall provide pool outlets with:
- (a) Overflow and main drain grating systems each designed to carry one hundred percent of the total recirculation filter flow and main drain piping designed to carry fifty percent or more of total recirculation filter flow;
 - (b) Overflow outlets that maintain:
- (i) A minimum of sixty percent of filter recirculation flow at all times; and
- (ii) An overflow channel which may be used on any pool and required on pools twenty-five hundred square feet or more on the pool perimeter to promote uniform circulation and skimming action of the upper water layer with:
- (A) A design preventing all matter entering the channel from returning to the pool;
- (B) Dimensions minimizing the hazard for bathers, such as catching arms or feet;
- (C) One one-hundredth of a foot slope per foot or more;
- (D) Drains sufficiently spaced and sized to collect and remove overflow water to return line and filter, where applicable; and
- (E) Size sufficient to carry one hundred percent of the recirculation flow plus the surge flow equivalent to one—

fifth of the balancing tank expressed in gallons per minute.

- (iii) Skimmers in lieu of pool overflow channels up to twenty-five hundred square feet if:
- (A) Weir provided in skimmer has a maximum flow rate through skimmer not exceeding four gpm per inch of weir;
- (B) Devices are recessed in the pool wall so no part protrudes beyond the plane of the wall into the pool;
- (C) The skimmer is equipped with a device to prevent air lock in the recirculation suction line, such as, an equalizer line;
- (D) The skimmer is equipped with a removable and cleanable screen designed to trap large solids;
- (E) Automatically adjustable and operates freely through all designed loading rates. Displacement shall be computed at ten gallons per bather.
 - (c) Main drains in all pools with:
 - (i) Location at the pool's low points;
 - (ii) A minimum of two main drains spaced:
- (A) Twenty feet or less apart nor closer than six feet; or
- (B) As far as possible from each other in pools seven feet or less linear floor distance.
- (iii) Total open area of grates sized to prevent a suction or entrapment hazard dangerous to user;
 - (iv) Grates on drains with:
- (A) Maximum flow of one and one-half feet per second; or
- (B) Net outlet area four times or more the area of the discharge pipe.
 - (v) Openings one-half inch or less wide;
 - (vi) Grates designed to withstand forces of users;
 - (vii) Grates removable only with specific tool; and
- (viii) Means to control flow from recirculation pump or balancing tank.
- (13) Flow. Owners shall maintain pool recirculation flow not to exceed:
- (a) Six feet per second in valved suction or discharge side of the pump; and
- (b) Ten feet per second in open discharge pipes on the pressure side of the pump or filter discharge. The recirculation flow limit does not apply to the return inlet and the last two feet of pipe leading to the inlet.
- (14) Balancing tanks. Owners with overflow channels requiring balancing tanks shall:
- (a) Maintain volume equivalent to seven times maximum bathing load expressed in gallons; and
- (b) Increase capacity as necessary to provide volume for make—up water and to prevent air lock in the pump suction line.
- (15) **Pumps.** Owners shall have and maintain wading pool recirculation pumps with adequate capacity to:
- (a) Provide design flows and pressure for water recirculation over the entire operating filter pressure;
- (b) Allow proper back washing of filters when specified; and
- (c) Have self-priming capability when installed above pool water level.

- (16) Strainers. Where pumps precede the filter, owners shall equip pool recirculation facilities with hair and lint strainers which shall:
 - (a) Be located upstream of recirculation pumps;
- (b) Provide strainer screen sufficiently strong to prevent collapse when clogged;
 - (c) Have an openable cover; and
- (d) Provide valving to isolate the strainer when located below pool water level.
- (17) Valves. Owners shall provide valves at appropriate locations to allow isolation and maintenance of equipment.
- (18) **Equipment rooms**. Owners shall provide equipment rooms:
- (a) Enclosing pumps, disinfection equipment, filters and other electrical and mechanical feed equipment and associated chemicals. Chemical storage shall conform to manufacturer requirements;
- (b) Providing work space and access to perform routine operations;
- (c) With a forty-six-square-foot minimum floor area and provide a three-foot minimum of access area to service equipment;
- (d) With one floor drain or more and a floor slope to the drain at a one-fourth-inch-per-foot minimum;
 - (e) Ready access if below grade;
 - (f) Ventilation;
- (g) Twenty foot-candles or more of light measured thirty inches from the floor; and
 - (h) Kept locked.
- (19) Make-up water. Owners shall ensure a source of make-up water and associated piping at the pool:
- (a) Providing sufficient quantity to replace daily pool losses;
- (b) Coming from a supply conforming with chapter 248-54 WAC;
- (c) Preventing cross connections using a minimum air gap of two pipe diameters or approved backflow prevention devices between the make—up water source and the pool water or waste water; and
- (d) If using a pool fill spout, not projecting greater than one inch into the space above the water surface area and shielded to not create a deck hazard.
- (20) Filters. Owners shall equip pools with filtration equipment:
- (a) Meeting the applicable standards of NSF or equivalent;
- (b) Using acceptable type and filter rates described under Table 080.1 of this section;
- (c) Having pressure or vacuum gauges for measuring loss of head through the filter with a minimum of one gauge preceding and one gauge following the filter;
- (d) Having a rate of flow indicator to measure flow which has accuracy, repeatability, and durability equivalent to flow meters meeting NSF standards; and
- (e) Having a means of discharging filter backwash to waste with:
- (i) Discharge in a manner not creating a public nuisance;
- (ii) Disposal in accordance with applicable local laws or regulations;

- (iii) Minimum air gap of two pipe diameters to prevent cross-connection from waste discharge and recirculation system piping;
- (iv) Discharge receptor and piping of sufficient size to accept backwash water and prevent flooding; and
- (v) Ability to monitor filter effluent during backwash, that is, use of a sight glass.
- (f) Providing means to release air entering the filter tank on pressure filters;
 - (g) When cartridge filters are used:
 - (i) Provide with an extra set of cartridges; and
- (ii) Have any bypass valves in a permanently closed position.
- (h) When using pressure DE filters with separation tanks:
- (i) Provide means of air release or a lid providing a slow and safe release of pressure; and
- (ii) Show a readily visible user warning that the air release must be opened before starting the circulation pump.

TABLE 080.1

Range of Accentable Filter Rate

TYPE AND RANGES OF FILTERS FOR WADING POOLS

Type of Filter Media		Expressed in gpm/Square Fee				
Sand		Mini	mum	М	aximum	
	Rapid Sand and Pressure Sand Wading Pools less than 10,000 gallons				3	
	High Rate Sand Pressure or Vacuum Wading Pools greater than 10,000 gallons High Rate Sand Pressure*			15		
	or Vacuum*		10		18	
		Continuous Feed	Manual Feed			
D.E.						
	Pressure	1.0	1.35		2.0	
Cartri	Vacuum dge**	0.8	1.0		2.0 0.375	

NOTE:

- *Filters sized at maximum application rate shall be equipped with flow control valves to maintain flow equilibrium to account for varying filter pressures and consequent flow production.
- **Cartridge filters shall have a nominal micron rating of twenty microns or less.
- (21) Disinfection equipment. Owners shall provide disinfection equipment:
- (a) Providing a continuous and effective disinfectant residual in the water;
- (b) Using a disinfectant with an easily monitored residual:
- (c) Having a design feed rate providing effective disinfection levels when the pool is in peak demand conditions:
- (d) Having easily cleanable equipment and piping used to apply chemicals and with provisions to prevent undue clogging. All materials shall be resistant to action of chemicals used;
- (e) Conforming to NSF standards if the disinfection equipment has:

- (i) Adjustable output rate chemical feed equipment for liquid solutions. When using this equipment, it shall:
- (A) Feed under positive pressure in the recirculation system;
 - (B) Provide means for dosage adjustment;
- (C) Have provisions to prevent hypochlorite solution siphoning when equipment is turned off, this applies when the disinfection equipment is above pool water level.
- (ii) Flow through chemical feed for solid feed material. Solid tablets or granules shall not be placed in skimmer baskets accessible to the public.
- (f) Allowing hand feeding on an emergency basis only;
- (g) Meeting the following conditions when using chlorine gas:
 - (i) Chlorine rooms shall:
 - (A) Be above ground level;
- (B) Be constructed so all openings or partitions with adjoining rooms are sealed;
- (C) Be located with consideration of prevailing winds to dissipate leaked chlorine away from the pool facility;
- (D) Have door opening outward only and to the out-of-doors;
- (E) Provide a sign on the door exterior reading DANGER CHLORINE. The sign shall be large enough to be read twenty-five feet away.
- (ii) Chlorine rooms shall have mechanical exhausting ventilation including:
- (A) Air inlet located a far as possible from fan intake to promote good air circulation patterns;
- (B) Minimum of one air change per minute in the chlorine room when fan is operating;
- (C) A remote switch outside the room or a door-activated switch to turn on fan before entering;
 - (D) Suction for fan near the floor;
- (E) Exhaust for fan and chlorinator vent located to prevent contaminating air intake and prevent undue hazard for the pool facility users; and
 - (F) Screened chlorinator vent.
 - (iii) Gas chlorine systems shall:
- (A) Be vacuum injection type, with vacuum-actuated cylinder regulators;
- (B) Provide integral backflow and anti-siphon protection at the injector; and
- (C) Provide taring (net weight of cylinder gas) scales for determining chlorine weight.
- (iv) Breathing protection available in an accessible area for the operator outside of the chlorine room including:
- (A) Self-contained breathing apparatus designed for use in a chlorine atmosphere for working with chlorine leaks and maintained in accordance with department of labor and industries standards; or
- (B) Provisions to substitute breathing protection at the site, if procedures can be established and documented with emergency service fire districts or other approved organization within the area for promptly responding to chlorine leaks.
- (v) Means for automatic shutoff when pool flow is interrupted; and

- (vi) Chlorine gas cylinders shall:
- (A) Be stored only in chlorine rooms;
- (B) Have approved valve-stem cylinder wrench on the valve stem to shut the system down in an emergency event:
 - (C) Be properly secured to prevent tipping;
- (D) Be tagged to indicate cylinders are empty or full; and
- (E) Not exceed one hundred fifty pounds tare weight per cylinder. If one-ton cylinder use is desired, an engineer specializing in chlorine design shall prepare a design proposal for department consideration.
- (22) Chemical feeding equipment for pH control. Owners applying chemicals for controlling pH through chemical feed equipment shall provide equipment with:
- (a) Adequate size and design to allow routine cleaning and maintenance;
 - (b) Materials resistant to chemical action;
- (c) Means for automatic shut off when pool flow is interrupted;
- (d) Chemical feed equipment for pH control on pools fifty thousand gallons volume or greater;
 - (e) Any pool feeding with:
 - (i) Caustic soda (NAOH);
 - (ii) Carbon dioxide (CO₂); or
- (iii) Other chemicals the department determines necessary to require metered and controlled feeding.
- (23) Heaters. Where pool heating equipment is provided, owners shall:
- (a) Locate equipment so any standing pilot is readily accessible; and
 - (b) Install equipment per NEC and UMC.
- (24) **Ventilation.** Owners shall provide indoor pool facility ventilation conforming with ASHRAE pool facility standards.
- (25) **Testing equipment.** Owners shall use testing equipment as noted in the water quality section under WAC 248-98-030(6).
- (26) Chemical storage. Owners shall ensure chemical storage design and placement minimizes safety risks.
- (27) **Restroom and plumbing fixtures.** Owners shall provide restroom and plumbing facilities at pools as follows:
- (a) Where wading pool facilities are provided in conjunction with general use and limited use swimming pools, spas, or other water recreation facilities, the wading pool bathing load shall be added to the total load for consideration of plumbing fixture units;
- (b) If a wading pool is the sole water recreation facility at a site, plumbing fixtures as described under Table 080.2 including:
 - (i) Flush toilets and toilet tissue in dispensers;
 - (ii) Shower facilities that:
- (A) Deliver water at a temperature range of ninety to one hundred ten degrees Fahrenheit;
 - (B) Provide single service soap in nonglass dispensers.
 - (iii) Sinks provided with:
 - (A) Tempered or hot and cold running water;
 - (B) Single service soap in nonglass dispensers; and
 - (C) Single service towels or electric hand dryers.

- (iv) Hose bibs with vacuum breakers conveniently accessible to pool and within one hundred feet; and
- (v) Sewage disposed of in a manner approved by the department or local health officer.

TABLE 080.2

PLUMBING FIXTURE MINIMUM REQUIREMENTS FOR SOLE FACILITY WADING POOLS

Wa	ding Pools with:	Toilets	Sinks	H.B.	Showers
1.	Limited use wading pools with living units* within 100 feet and less than 3 stories		_	1	
2.	Limited use wading pools with living units >100 feet but <500 feet and				
3.	less than 3 stories.** Limited use wading pools with living units >500 feet	1	1	1	-
	but $<1/4$ mile and/or with	1(M)	1(M)	1	***
	3 or more stories.**	1(F)	1(F)		_
4. L	imited use wading pools with living units >1/4 mile				
	or general use wading	1(M)	1(M)	1	1(M)
	pools.***	1(F)	1(F)	_	1(F)

NOTE:

- *"Living Units" means all units associated with limited use facilities intended to be served.
- **Consideration for elevators adjacent to pool may allow variance from this requirement.
- ***When wading pool bathing load exceeds 40 of either sex, the fixture units provided shall conform with the general use requirements for swimming pools.
- (c) If owners limit the number of people within their facility to a certain number and post maximum occupancy loading, the number of plumbing fixture units may be based on that maximum occupancy.
- (28) Lighting. Owners shall design and maintain pool facility lighting to:
- (a) Illuminate indoor facilities, outdoor facilities used after dusk, and locker room facilities with a minimum lighting intensity maintained thirty inches above any walking surface, pool deck, or pool area of:
 - (i) Thirty foot-candles at indoor facilities;
 - (ii) Fifteen foot-candles at outdoor facilities;
 - (iii) Twenty foot-candles in locker rooms.
- (b) Allow lifeguards or attendants to clearly see pool areas and walking surfaces;
- (c) Meet any additional lighting requirements deemed necessary by the department or local health officer;
- (d) Provide protective shielding for all lighting fixtures above walking surfaces and pool areas;
- (e) Provide all indoor facilities with one or more pool area emergency lights designed to turn on in the event of a power failure. The emergency lighting shall conform to requirements of UL standard 924.
- (29) Signs. Owners shall provide signs at pools which must convey the following conditions, but may be conveyed by any combination of words, pictures, or symbols:
 - (a) Prohibition of running or horseplay;
- (b) Prohibition of use by persons with communicable diseases;
- (c) Prohibition of use by persons under the influence of alcohol or drugs;

- (d) Prohibition of food or drink in the pool water;
- (e) In pools where lifeguards or attendants are not present, post requirements for facility use as required under WAC 248-98-085(3).
- (30) Food service. When food service is provided, owners shall:
- (a) At general use pool facilities, ensure food and beverage sale and consumption areas are separated from pool and deck. Special provisions may be made for allowing food and beverage service on the walkway provided a minimum six feet clear area is maintained between the pool edge and any tables or chairs provided for special facility functions;
- (b) At limited use pool facilities, prohibit food and beverage in the pool water and maintain a minimum four foot clear area between pool edge and any tables and chairs provided for food service;
 - (c) Provide trash containers;
 - (d) Prohibit glass containers in the pool facility.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-260-130, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90-07-010 (Order 042), § 248-98-080, filed 3/12/90, effective 4/12/90; Regulation .98.080, effective 3/11/60.]

WAC 246-260-140 Operation—Wading pools. (1) Operation plan. Owners shall ensure proper operation to protect the public health, safety, and water quality by establishing practices and developing an operations manual addressing each of the following:

- (a) Physical pool facility components;
- (b) Personnel;
- (c) Users and spectators;
- (d) Environmental conditions.
- (2) Physical components. Owners shall provide routine checks of the physical components:
- (a) Ensuring all structural facilities the users come in contact are intact and free from undue wear or fatigue and replaced as needed;
- (b) Eliminating adverse effects of water ponding on walking surfaces;
- (c) Ensuring preventative maintenance on equipment essential for protection of the public health, safety, and water quality;
 - (d) Maintaining barrier protection;
- (e) Ensuring treatment turnover is continuous twenty—four hours a day during seasons or periods of use and does not exceed three hours provided:
- (i) Allowances shall be made for minor equipment maintenance;
- (ii) Pools previously approved with turnover rates varying from subsection (2)(e)(i) of this section may continue to operate if water quality conditions conform with WAC 248-98-030.
- (3) Required personnel. Owners shall ensure appropriate personnel at pool facilities as follows:
- (a) A water treatment operator oversees that the water treatment components are adequately functioning to protect public health, safety, and water quality; and
- (b) At pool facilities with no lifeguards, assistant lifeguards, or attendants, use shall be subject to the following conditions:

- (i) When the pool is used by children twelve years of age or under, a responsible adult eighteen years of age or older shall accompany the children and be at the pool or pool deck at all times the children use the facility;
- (ii) When used by persons seventeen years of age or under, a minimum of two people are at the pool facility at all times the pool is in use;
- (iii) At general use pools, subdivision (b)(i) and (ii) of this subsection be posted; and
- (iv) At limited—use pools, subdivision (b)(i) and (ii) of this subsection be posted and ongoing provisions notifying the responsible person of the conditions.
- (4) Personnel duties and equipment. Owners shall ensure the specific duties and equipment of designated personnel include:
- (a) Lifeguards, during periods of lifeguarding, guard pool facility users in areas assigned;
- (b) Assistant lifeguards when provided at the pool used under the following conditions:
- (i) Assistant lifeguard limited to guarding responsibility of areas four feet or less in depth; and
- (ii) A lifeguard overseeing the activities of the assistant lifeguard.
- (c) Attendants when provided oversee use of the pool by the bathers and provide supervision and elementary rescues, such as reaching assists to bathers in need;
- (d) Water treatment operators oversee, as needed, the water treatment components are functioning adequately to protect public health, safety, and water quality;
- (e) Notification of responsible persons on the conditions for use at pool facilities not requiring lifeguards, and for which no lifeguards or attendants are present. A responsible person means a person having responsibility for overseeing users, including but limited to a person:
- (i) Renting an apartment, hotel, motel, RV camp site; or
- (ii) Who is an owner or member of a condominium, homeowner's association, mobile home park, or private club with a pool facility.
 - (f) Lifeguards, assistant lifeguards, or attendants:
 - (i) Wear distinguishing suit, uniform, or emblem; and
 - (ii) Equipped with a whistle or a signaling device.
- (5) **Personnel training.** Owners shall require training for each type of personnel including:
- (a) Lifeguards shall maintain a current certificate in the following:
- (i) Standard first aid and adult, single rescue CPR through ARC or American Heart Association; and
- (ii) Advanced lifesaving, advanced lifesaving review, or lifeguard training through ARC; or
- (iii) YMCA lifeguarding or crossover course through the YMCA; or
- (iv) Lifeguard through the National Lifeguard Service, Canadian; or
- (v) Lifeguard through National Pool and Waterpark Lifeguard Training; or
- (vi) Basic lifeguard through advanced lifeguard training international; or
- (vii) Other training the department determines equivalent; and

- (viii) Thirty-six months after enactment of the personnel training provisions of this chapter, the department shall no longer recognize training for lifeguards in advanced lifesaving, or advanced lifesaving review through the ARC.
- (b) Assistant lifeguards shall maintain current certificates and meet the requirements in the following:
- (i) Adult, single rescue CPR through ARC or American Heart Association; and
 - (ii) Emergency water rescue with ARC; or
- (iii) Bronze medallion award through the Royal Lifesaving Society of Canada; or
- (iv) Shallow water lifeguard through the National Pool and Waterpark lifeguard training; or
- (v) Other training the department determines equivalent; and
 - (vi) Be fourteen years of age or older.
- (c) Attendant shall maintain current certificates and meet the requirements in the following:
- (i) Adult, single rescue CPR through ARC or the American Heart Association; and
 - (ii) Basic water safety with ARC; or
- (iii) Other training the department determines equivalent; and
 - (iv) Be sixteen years of age or older.
- (d) Water treatment operator shall have specific knowledge in provision of pool water chemistry, filtration, pumping equipment and rules and regulations pertaining to pool facilities;
- (e) When pool facility is using chlorine gas, an operator shall have specific training as follows:
- (i) Proper operation of the chlorination equipment and routine maintenance procedures;
- (ii) Basic understanding of physical and chemical properties of chlorine gas under pressure;
- (iii) Basic understanding on use of leak detection and emergency safety equipment;
- (iv) Basic knowledge of proper first aid procedures and response for accidental inhalation of chlorine gas;
- (v) Six hours or more of formal instruction once every three years or three hours or more every eighteen months with certificate of training provided.
- (f) Persons shall be exempt from having current CPR or standard first aid certificates if the persons hold current certificates in any of the following:
- (i) Community CPR in place of adult, single rescue CPR;
 - (ii) In place of standard first aid:
 - (A) Advanced first aid;
 - (B) First responder;
 - (C) Emergency medical technician; or
 - (D) Paramedic.
- (iii) Other training the department recognizes as equivalent or exceeding current requirements.
- (6) Bather use. Owners shall establish conduct rules for users to ensure health and safety. The rules shall include signage noted under WAC 248-98-080(29).
- (7) Environmental conditions. Owners shall monitor various environmental conditions affecting the facility or the user and take appropriate action in response to these

factors, including electrical storms, visibility problems, etc.

(8) Closure. Owners shall close the facility when the facility or portion thereof presents an unhealthy, unsafe, or unsanitary condition. These conditions include lack of compliance with the water quality or operation requirements as detailed under WAC 248–98–030 and 248–98–085.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-260-140, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90-07-010 (Order 042), § 248-98-085, filed 3/12/90, effective 4/12/90.]

WAC 246-260-150 Spray pools. (1) Location. Owners shall locate pools to:

- (a) Minimize pollution by dust, smoke, soot, and other undesirable substances; and
- (b) Eliminate pollution from surrounding surface drainage.
- (2) Materials. Owners shall only use structure and equipment materials which are nontoxic, durable, inert, impervious to water and easily cleanable.
- (3) Walking surfaces. Owners shall design and maintain walking surfaces:
- (a) Uniformly sloping away from the pool or pools a minimum of one-fourth inch per foot and a maximum of one-half inch per foot;
- (b) Of a nonslip finish not presenting a tripping hazard;
- (c) Equipped with sufficient drains to prevent standing water;
 - (d) Of easily cleanable impervious finishes;
- (e) Four feet or more in width, extending around fifty percent or more of the spray pool;
- (f) In conformance with department-established guidelines for any resilient artificial surfaces.
- (4) Pool structure. Owners shall ensure general pool requirements include:
- (a) Pool surfaces with nonslip finishes and impervious to water;
- (b) Uniform pool floor slopes not to exceed one foot in twelve feet;
- (c) Provision for using an approved potable water supply. Water shall not be recirculated, but drain to waste after use in the spray pool; or
- (d) If a spray pool facility is used in conjunction with a swimming pool over thirty thousand gallons in volume, recirculated swimming pool water may be used in the spray pool if:
- (i) Means for treatment of the water draining from the spray pool is provided including filtration, disinfection, and recirculation through a separate spray pool treatment system;
- (ii) Such system is sized on the maximum introduction rate of water from the recirculated swimming pool water;
- (iii) Treated spray pool water is introduced into the swimming pool recirculation system;
- (iv) Proper safeguards are employed to prevent interruption of proper swimming pool facility operation; and

- (v) Design and construction of treatment equipment and associated facilities conform with swimming pool design requirements.
- (5) Inlets and outlets. Owners shall provide pool inlets and outlets with:
- (a) Spray nozzles not inflicting damage to users. Maximum flow through nozzles within close proximity to bathers shall not exceed fifteen fps at the nozzle;
- (b) The drain located at the low point of the pool and with sufficient capacity and design to prohibit water accumulation in the pool. The outlet drain shall:
 - (i) Be located at the low point of the pool;
 - (ii) Have openings one-half inch or less wide;
 - (iii) Use grate design to withstand forces of users;
- (iv) Have grates removable only with specific tools; and
 - (v) On grates attached to recirculating pumps, have:
- (A) Total open area of grates sized to prevent a suction hazard dangerous to the user;
- (B) Grates on drains with a maximum flow of one and one—half feet per second, or net area of outlet four times or more the discharge pipe area.
- (6) Valves. Owners shall provide valves at appropriate locations to allow isolation and maintenance of equipment.
- (7) Make-up water. Owners shall ensure a source of make-up water and associated pool piping:
- (a) Coming from a supply conforming with chapter 248-54 WAC;
- (b) Preventing cross connections using a minimum air gap of two pipe diameters or approved backflow prevention devices between the make—up water source and the spray pool water or waste water.
- (8) Waste water discharge. Water used in a pool shall be disposed of in a manner acceptable to the local health jurisdiction.
- (9) Signs. Owners shall provide signs at pools about general requirements for facility use. Owners may use any combination of words, pictures, or symbols conveying the prohibition of the following conditions:
 - (a) Running or horseplay;
 - (b) Use by persons with communicable diseases;
- (c) Use by persons under the alcohol or drug influence;
 - (d) Food or drink in pool water.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–150, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–090, filed 3/12/90, effective 4/12/90; Regulation .98.090, effective 3/11/60.]

WAC 246-260-160 Operation—Spray pools. (1) Operation plan. Owners shall ensure proper operation to protect the public health, safety, and water quality. An operations plan shall address each of the following:

- (a) Physical pool facility components;
- (b) Personnel;
- (c) Users and spectators;
- (d) Environmental conditions.
- (2) **Physical components.** Owners shall provide routine checks of the physical components:

- (a) Ensuring all structural facilities which the users come in contact are intact and free from undue wear or fatigue and replace as needed;
- (b) Eliminating adverse effects of water ponding on walking surfaces;
- (c) Ensuring preventative maintenance on equipment essential for protection of the public health, safety, and water quality.
- (3) Required personnel and duties. Owners shall provide personnel to oversee the spray pool facility ensuring proper operation and maintenance. When the facility is using recirculated water, a water treatment operator shall oversee water quality and equipment operation.
- (4) Bather use. Owners shall establish rules of conduct for users to ensure health and safety. The rules shall include conditions noted under WAC 248-98-090(9).
- (5) Environmental conditions. Owners shall monitor various environmental conditions affecting the facility or the user and take appropriate action in response to these factors, including electrical storms, visibility problems, etc.
- (6) Closure. Owners shall close the facility when the facility or portion thereof presents an unhealthy, unsafe, or unsanitary condition. The conditions include lack of compliance with the water quality and/or operation requirements as detailed under WAC 248–98–030 and 248–98–095.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as \$246-260-160, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90-07-010 (Order 042), \$248-98-095, filed 3/12/90, effective 4/12/90.]

WAC 246-260-170 Water recreation facility pools not in operation. Owners of pool facilities not in operation shall maintain one of the following conditions:

- (1) Inoperable spa, swimming, and wading pool access shall be locked; and
- (2) If pools are abandoned, backfilled with appropriate fill material.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–170, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–098, filed 3/12/90, effective 4/12/90.]

WAC 246-260-180 Bathing beaches. No bathing beach shall be maintained or operated when such water is determined by the health officer to be so polluted or subject to pollution as to constitute a menace to health if used for bathing. Where bathhouse and toilet facilities are provided for use of bathers they shall be constructed, maintained and operated in a sanitary manner approved by the health officer.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–180, filed 12/27/90, effective 1/31/91; Regulation .98.070, effective 3/11/60.]

WAC 246-260-200 Water recreation industry requirements. All owners of companies selling swimming pools, spa pools, wading pools or spray pools, and their associated facilities regulated by chapter 248-98 WAC shall furnish each purchaser a complete set of operating

instructions and shall include detailed information on the safe use of the facilities including:

- (1) Proper treatment methods to ensure water quality and sanitation;
 - (2) Proper safety procedures to reduce injury risks;
- (3) Specific safety instructions for use at facilities having water temperatures ninety—five degrees Fahrenheit or more on the health effects of hot water and a specific caution and explanation on the health effects of hot water on pregnant women and young children.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–200, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–100, filed 3/12/90, effective 4/12/90; Regulation .98.100, effective 3/11/60.]

WAC 246-260-210 Technical advisory committee.

- (1) The department shall appoint a technical advisory committee to assist in the following:
 - (a) Reviewing and drafting of proposed rules;
- (b) Development of guidelines for use of new products, equipment, procedures, and periodic program review.
- (2) The technical advisory committee shall have meetings whenever the department determines necessary.
- (3) The technical advisory committee water recreation pool facility membership shall include representation from the following:
 - (a) General use pool facility;
 - (b) Limited use pool facility;
- (c) Local representative from the spa and pool industry (NSPI);
- (d) Washington recreation and parks association representative;
 - (e) Engineer or architect design consultant;
- (f) Eastern and western Washington local environmental health authority representatives;
 - (g) Department representative;
- (h) RWCF owner representative, as appropriate, as described under chapter 248-97 WAC.
- (4) The technical advisory committee may appoint subcommittees as the committee determines appropriate to address specific issues.
- (5) The department shall maintain minutes of meetings.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–210, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–102, filed 3/12/90, effective 4/12/90.]

WAC 246-260-220 Restrictions on animals. Owners shall prevent animal access to the water recreation pool facility except by users or spectators requiring services of guide dogs accompanying them to the deck area.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–220, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–104, filed 3/12/90, effective 4/12/90.]

- WAC 246-260-230 Variance. (1) The department or local health officer may allow variance from this chapter or portions thereof provided:
- (a) The local health officer receives written department concurrence;
- (b) The department receives written local health officer concurrence in jurisdictions with active water recreation facilities programs;
- (c) Data and/or research provides sufficient evidence to the satisfaction of the department or local health officer the water recreation facility, or considered components, adequately protects public health and safety, as well as water quality;
- (d) The variance is consistent with the intent of this chapter.
- (2) The department and local health officer shall provide the board an annual summary of variances granted January 31 of the following year or at the board's request at any time. The board may evaluate such variances granted to determine if the provisions of this chapter are met.
- (3) The board may, in its discretion, make provisions to submit variance requests to the board for review and decision.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–230, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–110, filed 3/12/90, effective 4/12/90; Order 715, § 248–98–110, filed 9/14/72.]

WAC 246-260-240 Substitution. The board authorizes the department to allow substitutions of equipment, facilities, or procedures required by chapter 248-98 WAC when, in the sole determination of the department, data and/or research provide sufficient evidence that such substitution is equivalent to the requirement and will adequately provide for the protection of the public health and safety of persons using the water recreation facility.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–240, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–120, filed 3/12/90, effective 4/12/90; Order 715, § 248–98–120, filed 9/14/72.]

WAC 246-260-250 Enforcement. (1) The department or, if enforcement responsibility is assigned under a joint plan of operation in WAC 248-98-005, the local health officer:

- (a) Shall enforce chapter 248-98 WAC rules; or
- (b) May refer cases within the department's or local health officer's jurisdiction to the local prosecutor's office or the office of the attorney general, as appropriate.
- (2) When a water recreation facility (WRF) is in violation of chapter 70.90 RCW provisions or chapter 248–98 WAC rules, appropriate enforcement action may be initiated by the department, local health officer, local prosecutor's office, or office of the attorney general. Enforcement actions may include any one or a combination of the following:

- (a) Informal administrative conferences to explore facts and resolve problems, convened at the request of the department, local health officer, or owner;
- (b) Orders directed to the water recreation facility (WRF) owner and/or operator and/or the person causing or responsible for the violation of the chapter 248-98 WAC rules;
- (c) Imposition of civil penalties of up to five hundred dollars per violation per day as authorized under RCW 70.90.200:
- (d) Denial, suspension, or revocation of operating permits; and
- (e) Civil or criminal action initiated by the local prosecutor's office or by the office of the attorney general.
- (3) Orders authorized under this section include, but are not limited to the following:
- (a) Requiring corrective measures necessary to effect compliance with chapters 248–98 WAC or 70.90 RCW. Such orders may or may not include a compliance schedule; and
- (b) Orders to stop work and/or refrain from using any WRF or portion thereof or improvement thereto until all permits, certifications, and approvals required by statute or rule are obtained.
 - (4) An order issued under this section shall:
 - (a) Be in writing;
- (b) Name the facility and the person or persons to whom the order is directed;
- (c) Briefly describe each action or inaction constituting a violation of chapters 70.90 RCW or 248-98 WAC rules;
- (d) Specify any required corrective action, if applicable;
- (e) Provide notice, as appropriate, that continued or repeated violation may subject the violator to:
 - (i) Civil penalties of up to five hundred dollars;
- (ii) Denial, suspension, or revocation of the facility's operating permit; or
- (iii) Referral to the county prosecutor or attorney general's office.
- (f) Provide the name, business address, and phone number of an appropriate staff person who may be contacted regarding an order.
 - (5) Service of an order shall be made:
 - (a) Personally, unless otherwise provided by law; or
 - (b) By certified mail return receipt requested.
- (6) Under department or local health officer adopted rules or policies, civil penalties of up to five hundred dollars per day may be assessed against any person violating provisions of chapters 70.90 RCW or 248–98 WAC.
- (7) The department or local health officer shall have cause to deny the operating permit application or reapplication or to revoke or suspend a required operating permit of any person who has:
 - (a) Previously had:
 - (i) An operating permit suspended or revoked; or
 - (ii) An operating permit application denied for reason.
- (b) Failed or refused to comply with provisions of chapters 70.90 RCW and 248-98 WAC or any other

- statutory provision or rule regulating the WRF construction or operation; or
- (c) Obtained or attempted to obtain an operating permit or any other required certificate or approval by fraudulent means or misrepresentation.
- (8) For the purposes of subsection (7) of this section, a person shall be defined to include:
 - (a) Applicant;
 - (b) Reapplicant;
 - (c) Permit holder; or
- (d) An individual associated with subsection (8)(a), (b), or (c) of this section including, but not limited to:
 - (i) Board members;
 - (ii) Officers;
 - (iii) Managers;
 - (iv) Partners;
 - (v) Association members;
 - (vi) Agents; and
- (vii) In addition, third persons acting with the knowledge of such persons.
- (9) The department or local health officer may summarily suspend an operating permit, other required permit, license, or certification without a prior hearing if the department or local health officer:
- (a) Finds public health, safety, or welfare imperatively requires emergency action; and
- (b) Incorporates a finding to that effect in its notice or order.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-260-250, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90-07-010 (Order 042), § 248-98-130, filed 3/12/90, effective 4/12/90.]

- WAC 246-260-260 Hearings. (1) A person aggrieved by the department's or local health officer's denial, suspension, or revocation of any permit may request an administrative hearing.
- (a) A hearing requested to contest a local health officer's action shall be governed by the local health jurisdiction's rules for hearings.
- (b) A hearing requested to contest the department's action shall be governed by RCW 43.20A.205. The applicant's and permit holder's right to an adjudicative proceeding is in the same law.
- (c) The procedure for the adjudicative proceeding is in this chapter and in chapter 248-08 WAC.
- (2) Any person aggrieved by the department's or local health officer's application of civil penalties may request an administrative hearing.
- (a) A hearing requested to contest a local health officer's action shall be governed by the local health jurisdiction's rules for hearings.
- (b) A hearing requested to contest the department's action shall be governed by RCW 43.20A.205. When the department imposes a civil fine, the right of a person to an adjudicative proceeding is in the same law.
- (c) The procedure for the adjudicative proceeding is in this chapter and in chapter 248-08 WAC.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–260–260, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90–07–010 (Order 042), § 248–98–135, filed 3/12/90, effective 4/12/90.]

- WAC 246-260-990 Fees. (1) The fee for a review of plans for a new public swimming pool with a volume equal to or greater than one hundred twenty-five thousand gallons at overflow shall be five hundred dollars.
- (2) The fee for review of a new public swimming pool with a volume of less than one hundred twenty—five thousand gallons at overflow shall be three hundred dollars.
- (3) The fee for review of plans for a new semipublic swimming pool with a volume equal to or greater than seventy—five thousand gallons at overflow shall be two hundred dollars.
- (4) The fee for review of plans for a new semipublic swimming pool with a volume of less than seventy—five thousand gallons at overflow shall be one hundred fifty dollars.
- (5) The fee for review of plans for a wading pool shall be one hundred dollars.
- (6) The fee for review of plans for a spray pool shall be seventy-five dollars.
- (7) The fee for review of plans for alteration or modification of an existing swimming, wading, or spray pool in accordance with subsection (1), (2), (3), (4), (5), or (6) of this section shall be the total of actual direct and indirect costs, not to exceed one-half of the fee for review of a new project.
- (8) In water recreational facilities with any combination of more than one swimming pool and/or wading pool and/or spray pool, the review fee shall be the highest applicable fee specified in subsection (1), (2), (3), (4), (5), or (6) of this section plus one-half of each lowest applicable fee or fees specified for each attraction in the facility.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-260-990, filed 12/27/90, effective 1/31/91.]

WAC 246-260-998 Severability. If any provision of this chapter or its application to any person or circumstances is held invalid, the remainder of this chapter or the application of the provision to other persons or circumstances shall not be affected.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-260-998, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 90-07-010 (Order 042), § 248-98-998, filed 3/12/90, effective 4/12/90.]

Chapter 246-262 WAC RECREATIONAL WATER CONTACT FACILITIES

WAC	
246-262-001	Purpose and authority.
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246-262-030	Construction permit.
246-262-040	Operating permit.
246-262-050	Water quality standards, analysis, and sample
	collection.
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246-262-080	Operation.
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246-262-120	Enforcement.
246-262-130	Notice of decision—Adjudicative proceeding.
246-262-140	Insurance.
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246-262-170	Innovations—Substitutions.
246-262-990	Fees.

WAC 246-262-001 Purpose and authority. The purpose of these rules is to protect the health, safety, and welfare of users of recreational water contact facilities (RWCFs). The rules as set forth are adopted per RCW 70.90.120.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–262–001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 88–13–125 (Order 311), § 248–97–010, filed 6/22/88.]

- WAC 246-262-010 Definitions. (1) "Advanced first aid" means a course of instruction recognized by the American Red Cross, department of labor and industries, the U.S. Bureau of Mines, or fire services training program.
- (2) "ANSI" means American National Standards Institute.
- (3) "Approved" means the department or local health officer has stated in writing that the design plans and specifications are in accordance with chapter 248–97 WAC.
 - (4) "ARC" means American Red Cross.
- (5) "Architect" means a registered architect currently licensed under chapter 18.08 RCW in Washington state.
- (6) "ASTM" means American Society for Testing Material.
- (7) "Attendant" means a person trained to operate an attraction and control the users in a safe orderly manner.
- (8) "Attraction or ride" means any of the specific types of recreational facilities involving partial or total immersion or intentional contact with the water designated for public recreational use.
- (9) "Biomechanics" means the study of the human body as a system operating under the laws of Newtonian mechanics and the biological laws of life.
 - (10) "Board" means the state board of health.
- (11) "Boogie or mini-surf board" means any semirigid device used in a wave pool for flotation or as a riding device.
- (12) "Centerline" means the path defined by geometric midpoints of a component or structure, generally used in consideration of the slide path in flume rides.
- (13) "Communication system" means any combination of devices permitting the passage of or exchange of messages between park operating personnel and between operating personnel and users. Systems can include, but are not limited to, two-way radios, hardwired intercoms, horns, whistles, hand signals, direct voice, signs, or equivalent.
- (14) "Contaminant" means any physical, chemical or biological substance present in the RWCF water which may adversely affect the health or safety of the user and/or the quality of the water.

- (15) "CNCA" means Council for National Cooperation in Aquatics.
- (16) "Cross-connection" means any physical arrangement connecting:
- (a) A potable water system directly or indirectly, with anything other than another potable water system; or
- (b) A RWCF to any potable or nonpotable water source capable of contaminating either the RWCF or potable water source as a result of backflow.
- (17) "Department" means the department of social and health services.
- (18) "Discharge section" means the component or components making up the exit of the water slide, water tube, inner tube ride, speed slide, ramp slide, drop slide or drop tube, or kiddie flume. These components are the elements controlling the final direction and speed of the user.
- (19) "Diving envelope" means the minimum dimensions of an area within the pool necessary to provide entry from a diving board, platform, or attraction segment where users enter above pool water level.
- (20) "Drop slide or drop tube ride" means a sloped trough, chute, or tube exiting the user above the pool operating water level.
- (21) "Engineer" means a registered professional engineer currently licensed under chapter 18.43 RCW in Washington state.
- (22) "Entry access points" means the areas where users enter an attraction.
- (23) "Entry rate" means the frequency at which users are permitted access to the attraction.
- (24) "Ergonomics" means a multidisciplinary activity dealing with the interactions between humans and their environment plus the traditional environmental elements atmosphere, heat, light, and sound, as well as objects with which the user comes in contact.
- (25) "FINA" means Federation Internationale de Natation Amateur.
- (26) "Flume or tube entry" means the area at which users enter a water slide, water tube, inner tube ride, speed slide, drop slide, drop tube, or kiddie flume.
 - (27) "fps" means feet per second.
 - (28) "gpm" means gallons per minute.
- (29) "IAAPA" means International Association of Amusement Parks and Attractions.
- (30) "Injury or illness report" means the written record of all facts regarding an injury or illness associated with the RWCF.
- (31) "Inner tube ride" means an attraction where users ride inner tube-like devices through a series of chutes, channels, flumes, and pools.
- (32) "Innovative recreational water contact facility" means any type of RWCF currently unregulated.
- (33) "Intermediate pool" means any pool between the entry and exit pools in attractions using a series of pools.
- (34) "Kiddie flume or tube attraction" means a flume, chute, or tube designated for and restricted to use by small children.
- (35) "Lifeguard" means an individual currently certified by red cross in advanced lifesaving or lifeguard

- training, or YMCA senior lifesaver, or equivalent certification through the royal Canadian lifeguard services.
- (36) "Lifeguard station" means the designated work station of the lifeguard.
- (37) "Local health officer" means the health officer of the city, county, or city-county department or district or a representative authorized by the local health officer.
 - (38) "mg/l" means milligrams per liter.
- (39) "Multi-activity pool" means a pool with more than one type of attraction (i.e., an adult activity pool with a series of tubes, chutes, cable rides, etc., intended for use by individuals with specific swimming abilities).
 - (40) "NSF" means National Sanitation Foundation.
 - (41) "NSPI" means National Spa and Pool Institute.
- (42) "Operating levels" means water levels maintained within attractions during use for proper operation of facility and for controlling safety and sanitation.
- (43) "Operations" means all aspects of a RWCF which must be controlled to make the facility safe, healthy, and usable for the purpose intended.
- (44) "Owner" means a person owning and responsible for a RWCF or authorized agent.
- (45) "Person" means an individual, firm, partnership, co-partnership, corporation, company, association, club, government entity, or organization of any kind.
- (46) "Ponding" means a condition where water fails to drain from walking surfaces.
 - (47) "ppm" means parts per million.
- (48) "Primary zone of visual coverage" means the area assigned to a lifeguard or attendant for primary visual surveillance of user activity.
- (49) "Radius of curvature" means the radius arc which denotes the curved surface from the point of departure from the vertical sidewall (springline) of the pool to the pool bottom.
- (50) "Ramp slide" means a slide allowing one or more users to slide in unison down a straight incline to a runout or a receiving pool.
- (51) "Recirculation filter water" means water which is recirculated by the RWCF for treatment purposes, i.e., filtration and disinfection.
- (52) "Response time" means elapsed time between bather distress and initiation of rescue assistance by a lifeguard (or attendant where applicable).
- (53) "RWCF" means recreational water contact facility which is an artificial water associated facility with design and operational features that provide patron recreational activity which is different from that associated with a conventional swimming pool and purposefully involves immersion of the body partially or totally in the water and includes, but is not limited to, water slides, wave pools, and water lagoons.
- (54) "Secretary" means the secretary of the department of social and health services.
- (55) "Serious injury" means any injury requiring admission to a hospital.
- (56) "Speed slide or speed tube" means a sloped trough, flume, tube, or roller track having long straight and/or steep drops where users sustain speeds of twenty miles per hour or more.

- (57) "Springline" means the point from which the pool wall breaks from vertical and begins its arc in the radius of curvature (for coved construction) to the bottom of the pool.
- (58) "Surfboard" means a rigid device used in a wave pool for riding.
- (59) "Tail coverage" means providing insurance coverage for a given period of time for discovery of claims made after the policy term for "claims made" type of insurance.
- (60) "Total turnover" means the time it takes for the pool attraction water volume to be recirculated as a sum of the flows from treatment turnover and attraction recirculation systems turnover.
- (61) "Treatment turnover" means the minimum time necessary to circulate the entire attraction water volume through the recirculation filter system.
- (62) "T.U." means turbidity unit as measured by the nephelometric method.
- (63) "Wading activity pool" means a pool or area less than twenty-four inches in total water depth with activities intended for younger children.
- (64) "Walking surface" means any direct access surface to the attractions or change rooms where the user will be in bare feet. Areas set aside for picnicking, sunbathing, and lounging are excluded.
- (65) "Water slide or water tube" means a sloped trough-like flume or tube structure of varying slope and direction using water as a lubricant and/or method of regulating the rider speed.
- (66) "Water treatment operator" means the person appointed to operate the mechanical equipment and perform related water quality monitoring for proper operation of the physical facility.
- (67) "Wave pool" means a recreational pool producing waves which usually begin at the deep end and proceed toward and dissipate at the shallow end.
 - (68) "WWA" means World Waterpark Association.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–262–010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 88–13–125 (Order 311), § 248–97–020, filed 6/22/88.]

WAC 246-262-020 General administration. (1) The department and the local health officer for each local health jurisdiction containing a RWCF shall develop a joint plan of operation listing the roles of each agency for administering these rules. The plan shall designate who will be responsible for:

- (a) Plan review;
- (b) Permit issuance;
- (c) Inspection;
- (d) Surveillance; and
- (e) Enforcement.
- (2) The department shall have information on which agency to contact for obtaining construction and operation permits.
- (3) Fees may be charged as authorized in RCW 70-.90.150.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–262–020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 88–13–125 (Order 311), § 248–97–030, filed 6/22/88.]

- WAC 246-262-030 Construction permit. (1) Persons planning to construct, alter, or modify a RWCF, excluding routine maintenance, shall provide the following to the department or local health officer for review and approval:
 - (a) A completed construction permit application;
- (b) Three sets of plans and specifications prepared and signed by an engineer or architect; and
- (c) A report prepared by an engineer certifying the design of the RWCF is consistent with accepted safety engineering practices and industrial standards. Such engineer shall have experience in safety design, including ergonomic aspects of biomechanics of RWCFs, amusement rides, or equal.
- (2) Owners may schedule a predesign meeting with the designer and the department or local health officer to determine if the project is consistent with the intent of these rules;
- (3) Following review of the completed permit application and plans and specifications, the department or local health officer shall:
- (a) Forward written approval, including construction permit, or denial to the owner;
- (b) Forward a copy of approved plans to the designer; and
- (c) Forward a copy of the approval letter to the department or local health officer and local building department.
- (4) The owner shall ensure any construction, modification, or alteration is completed according to approved plans and specifications;
- (5) Upon completion of RWCF construction, alteration, or modification and prior to use, owners shall:
- (a) Submit to the department or local health officer a construction report signed by an engineer or architect certifying that construction is substantially in compliance with approved plans and specifications; and
- (b) Notify the department or local health officer at least five working days prior to intended use of the facility.
- (6) Owners of the RWCF must comply with all other applicable agency codes and standards. These include, but are not limited to:
- (a) The National Electrical Code, chapter 19.28 RCW and chapter 296-46 WAC as determined by the electrical section of the Washington state department of labor and industries;
- (b) Local gas piping and appliance codes, American Gas Association standards, and certification meeting the latest ANSI Z21.56 or other applicable and equivalent standards;
- (c) Local building authority standards, including structural design of components;
 - (d) State and local plumbing authority standards;
- (e) Washington state department of labor and industries requirements for pressure vessels under chapter 70-.79 RCW and chapter 296-104 WAC; and

(f) Codes designated under chapter 70.92 RCW for handicapped accessibility.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-262-030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 88-13-125 (Order 311), § 248-97-040, filed 6/22/88.]

- WAC 246-262-040 Operating permit. (1) No person shall operate a RWCF without a current operating permit issued by the department or local health officer.
- (2) To obtain an operating permit, owners of an RWCF must provide information to the department or local health officer that shows the RWCF is in compliance with these rules.
 - (3) Operating permits shall be:
 - (a) Valid for one year;
 - (b) Renewed annually; and
- (c) Nontransferable without written consent of the department or local health officer. For purposes of this section, a change in management of a corporation, partnership, association, or other nonindividual business entity shall create a new person requiring either consent to a permit transfer or issuance of a new permit upon proper application.
- (4) The department or local health officer issuing the operating permit may revoke or suspend the permit if the RWCF is not operated in accordance with chapter 70.90 RCW or chapter 248-97 WAC.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–262–040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 88–13–125 (Order 311), § 248–97–050, filed 6/22/88.]

- WAC 246-262-050 Water quality standards, analysis, and sample collection. (1) Owners shall maintain waters free from harmful levels of disease-producing organisms, toxic chemicals, or adverse physical conditions.
- (2) Owners shall maintain RWCF waters to meet standards of bacteriological quality. Standards include:
- (a) Heterotrophic plate counts not to exceed a density of two hundred bacteria per milliliter in any series of tests: and
- (b) Total coliform density not to exceed an average of one coliform bacteria per one hundred milliliters in any series of tests.
- (3) Owners shall maintain continuous and effective methods of disinfection of RWCF waters at all times with use of:
- (a) Chlorine or bromine as described in Table 1 of this section; and/or
- (b) Alternate forms of disinfection which meet the following criteria:
- (i) Registered with the environmental protection agency, if necessary;
- (ii) Registered with the Washington state department of agriculture, if necessary;
- (iii) Conformance with NSF standard 50 or equal when applicable; and
- (iv) Adherence to guidelines established by the department.
 - (4) Owners shall maintain:

- (a) Physical and chemical conditions within the ranges specified in Table 2 of this section; and
 - (b) Cleanliness by:
- (i) Closing an affected area of the RWCF or affected portion when contaminated with feces, vomit, sewage, or other hazardous or unknown material until the area is clean, disinfected, and free of the hazardous material;
- (ii) Daily removal of scum or floating material on the pool water surface; and
- (iii) Continuous removal of scum or floating material by action of overflow of pool water with flotsom screened and filtered.
- (5) Persons collecting water samples for laboratory analysis shall:
- (a) Collect and transport samples for chemicals and micro-organisms based on the most recently published edition of standard methods for the examination of water and waste/water analysis published jointly by the American Public Health Association/Water Pollution Control Federation and American Waterworks Association; hereafter, it is referred to as "standard methods;"
- (b) Have laboratory tests performed per "standard methods" at laboratories approved by the department to provide such analyses;
- (c) Provide adequate data for completing analyses; and
- (d) Use water sample bottles approved by the department for collection of samples.
- (6) Persons shall use field test kits with a suitable range of accuracy for the parameters routinely measured as noted in Table 3 of this section.
- (7) Owners shall require and ensure addition of chemicals or materials to RWCF water only when the use has been approved or recognized as acceptable by the department. Current lists of approved or acceptable materials are available from the department.
- (8) Owners shall perform additional tests as directed by the department or local health officer.

TABLE 1 MINIMUM AND MAXIMUM LEVELS OF DISINFECTANTS

Currently Recognized Disinfectants	Type of Residual Measured		Residu	9; 7.8-8.0 nal Levels	Maximum Residual Level in mg/1*
1. Chlorine	Free available chlorine	1.0	1.4	1.8	8
 Chlorinated cyanurate 	Free available chlorine	1.5	2.0	2.8	8
3. Bromine	Total available bromine	2.0	2.5	3.5	8

Note:

 * Maximum residual or manufacturer's recommendation (whichever is less).

TABLE 2 ACCEPTABLE RANGES OF SELECTED PHYSICAL AND CHEMICAL WATER QUALITY CONSTITUENTS

Chemical or Physical Constituent	Minimum	Maximun
1. pH	7.2	8.0
2. Water Clarity (safety)	main drain visible at	_
	all times	

TABLE 2 ACCEPTABLE RANGES OF SELECTED PHYSICAL AND CHEMICAL WATER QUALITY CONSTITUENTS

	emical or Physical Constituent Turbidity (shielding micro-	Minimum	Maximum 0.5* T.U.
	organisms from disinfection) Cyanuric acid or its derivatives	0	90 mg/1
5.	(if used) Temperature		104°F.

Note:

* In peak use periods, turbidity may increase to 1.0 T.U. provided it returns to 0.5 T.U. within a six-hour period after peak use. Turbidity is not a required routine analysis which must be performed by the RWCF. Turbidity monitoring may be required by the department or local health officer if special conditions warrant it.

TABLE 3
RANGE OF ACCEPTABLE TESTING LEVELS*

Chemical Test	Minimum Range	Minimum Accuracy
 Free available chlorine Total chlorine Total bromine pH Cyanuric acid Alkalinity 	0.3 to 3.0 mg/1 0.3 to 3.0 mg/1 0.3 to 3.0 mg/1 7.0 to 8.2 0 to 100 mg/1 0 to 300 mg/1	0.2 mg/1 0.2 mg/1 0.2 mg/1 0.2 5 mg/1 15 mg/1

Note:

* Do not make determinations of chemical conditions based on readings at the extreme measurable limits of the scale.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-262-050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 88-13-125 (Order 311), § 248-97-060, filed 6/22/88.]

WAC 246-262-060 General design, construction, and equipment. (1) Owners shall locate RWCFs to:

- (a) Minimize pollution by dust, smoke, soot, and other undesirable substances;
- (b) Eliminate pollution from surrounding surface drainage; and
- (c) Ensure pools within the RWCF are more than fifteen feet from any structure, object, or land formation (i.e., pumphouse, tree, etc.), which would provide a user with the opportunity to jump from such a structure into the pool. This does not include any barriers provided to prevent unauthorized access to pool or segments of attractions which enter pool.
- (2) Owners shall use only materials in the structure and equipment which are nontoxic, durable, inert, impervious to water, and easily cleaned.
- (3) Owners shall design and maintain walking surfaces which are:
 - (a) Sloped a minimum one-fourth inch per foot;
 - (b) Of a nonslip finish;
- (c) Equipped with sufficient drains to prevent standing water;
 - (d) Free of resilient coverings, e.g., carpeting; and
 - (e) At least four feet in width.
- (4) Owners shall provide adequate barrier protection to prevent unauthorized access including:
- (a) In outdoor facilities, a barrier six feet or more in height with:

- (i) Openings, holes, or gaps not to exceed four inches except openings protected by gates or doors; and
- (ii) Lockable gates and entrances either regulated during periods of use or provided with a self-closing, self-latching mechanism a minimum of forty-two inches from the ground.
- (b) In indoor facilities, suitable barriers to prevent access by unauthorized individuals or pool access by unattended small children.
 - (5) Owners shall ensure that pools:
- (a) Comply with all provisions of chapter 248–98 WAC where pool facilities are a separate attraction;
 - (b) Have surfaces with:
- (i) Materials complying with subsection (2) of this section;
 - (ii) Watertight and nonabrasive construction;
 - (iii) Nonslip finish where users are walking; and
- (iv) White or light color finish not obscuring the view of objects or surfaces.
- (c) Are dimensionally designed to provide for the safety of the user and circulation of the water including, but not limited to:
- (i) Absence of protrusions, extensions, means of entanglement, or other obstruction which can cause entrapment or injury;
- (ii) Construction tolerances conforming with current ANSI public pool standards;
 - (iii) Uniform pool floor slopes as follows:
- (A) Not exceeding one foot of drop in seven feet of run for pools serving as landing or exiting pools, where total water depth is less than forty-eight inches; and
- (B) Providing a maximum slope of one foot of drop in twelve feet of run up to a depth of five and one—half feet in pools where users enter and participate in extended activities.
- (iv) Vertical walls for a minimum distance noted in Table 4 of this section, which may be curved (not to exceed allowable radius) to join the floor.
- (A) Vertical means walls not greater than eleven degrees from plumb.
- (B) Coving or portion of the side wall of a diving area in the pool shall conform as described in subsection (5)(c)(vi) of this section.
- (C) In new construction or alterations to existing construction, ledges are prohibited.
- (D) Requirements in subsection (5)(c) of this section do not apply to spas.
- (v) A maximum intrusion beyond the vertical (as defined in subsection (5)(c)(iv)(A) of this section) with any configuration not to exceed a transitional radius from wall to floor where floor slopes join walls and which:
- (A) Has its center of radius no less than the minimum vertical depth specified in Table 4 of this section below the water level;
 - (B) Has arc of radius tangent to the wall; and
- (C) Has a maximum radius of coving (or any intrusion into the pool wall/floor interface) determined by subtracting the vertical wall depth from the total pool depth.

TABLE 4 MAXIMUM RADIUS COVING OR POOL INTRUSION DIMENSIONS BETWEEN POOL FLOOR AND WALL*

Pool Depth Minimum Side Wa		2'6"	3'0"	3'6"	4'0"	4'6"	5'0"	>5'0"
Vertical Depth Maximum Radius		1'10"	2'2"	2'6"	2'10"	3'2"	3'6"	>3'6"
of Curvature	6"	8 "	10"	12"	1'2"	1'4"	1'6"	**Maximum radius equals pool depth minus the vertical wall depth

Note:

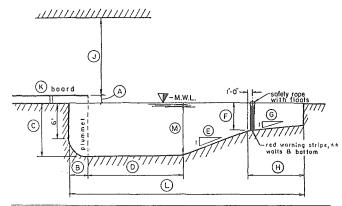
- * For pool depths which fall between the depths listed, values can be interpolated.
- ** Radius of coving cannot intrude into pool within diving envelope or deep water entry area for attractions entering above pool water level.
- (vi) Provision of diving envelopes in pools or areas of pools designated for diving activities to include:
- (A) A diving envelope of no less than the CNCA standard configuration* noted in Figure 1 of this section in areas where user would enter from deck level, diving board, or platform at a height of less than one—half meter (twenty inches).

Note:

* This requirement is based on a standard described in CNCA publication "Swimming Pools: a Guide to their Planning, Design, and Operation" 1987. Fourth edition. Human Kinetics Publisher, Inc., Champaign, Illinois. Figure 8.1

FIGURE 1:

Minimum dimensions for pools with provision for diving from deck level or providing boards or platforms at a height less than one-half meter.



Dimension	Minimum	Preferred or Maximum	
A Height of board above water		20 in.	
B Board overhang	2 ft 6 in.	3 ft	
C Depth of water at plummet	9 ft	10 ft *	
D Distance from plummet to start of upslope	16 ft	18 ft *	
E Inclination of upslope of bottom		1:3	
F Depth of water at breakpoint	4 ft 6 in.		
G Slope of bottom in shallow portion of pool	1:12	1:15 *	
H Length of shallow section of pool	8 ft	14 ft *	
Distance to any overhead structure	13 ft	15 ft *	
K Board length		12 ft	
L Length of pool	40 ft	50 ft *	
M Dimension not less than C minus	6 in.		

Note:

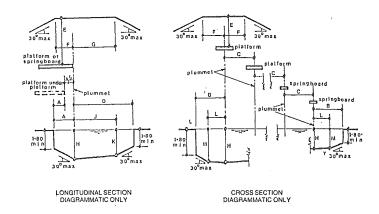
- * Values with asterisks are not to be considered as maximums.
- ** Warning stripe at break point may be of any contrasting color.
- (B) A diving envelope of no less than the FINA standard configuration** noted in Figure 2 of this section in areas where user would enter from diving board or platform at a height of one—half meter (twenty inches) or greater.

Note:

** This requirement is based on a standard described in FINA publication "FINA Handbook – 1986–1988." Constitution and rules governing swimming, diving, water polo, and synchronized swimming, 1986–1988. Edited by E. Allen Harvey, Vancouver, Canada VGN 3R6, Section D, pp. 114–115.

FIGURE 2:

Minimum dimensions for pools with boards or platforms at a height of one-half meter or more.



				00011101	20105					DI 41	FORM					
	10	Dimensions		SPRING					7 N		FORM	4	7.5 1	-4 1	10 1/2	·
FII		are in Metres	1 Netre		3 Hetres			1 Metre 3 Metres			5 Metres		7.5 Metres		10 Metres 6.00	
	MENSIONS FOR	LENGTH	4.80 4.80			4.50		5.60 6.69					2.80			
	VING FACILITIES	HIDIH	0.50 0.50						.50 1.50			1.50 7.50		10.00		
Ke	vised to 1st Jan 1987	HE16HT	1.8 HOR1Z	VERT	3.01 HORIZ	VERT		VERT	2.60-3 HORIZ	VERT	5.8 HORIZ		HORIZ	VERT		VERT
	Г1A	BECTCHATTON		AFUI		AFWI		ACMI		VERI		YERI	A-7.5	YENI	A.10	VENT
A	From plummet	DESIGNATION	A-1	├	A-3		A-1P1		A-3P1		A-5		1.50		1.50	
	BACK TO POOL HALL	RINIHUM	1.88	 	1.80		0.75		1.25		1.25	 		-		17/1
A/A	From plummet	DESIGNATION				 					AA5/1	ļ	AA7.5/3	/1	AA10/5	/3/1
	BACK TO PLATFORM				1		1									
	Plummet directly below	MUNININ	ļ	 	 			ļ			1.50	 	1.50		1.50	
B	From plummet to	DESIGNATION	B-1	 	B-3		B-1pl	 	B-3p1		B-5		0-7.5	ļ	8-18	
	POOL WALL AT SIDE	HINIHUM	2.50	ļ	3.50		2,30		2,98	L	4,25	 -	4.50	1	5.25	L
C.	From plummet to	DESIGNATION	C-1/1	ļ	C-3/3/1		C-1/1p1		C-3/1P1	/3pl	C-5/3/1	 	C-7.5/5	/3/1	C-18/7	5/5/3
	<u>ADJACENT PLUMMET</u>	HINIHUM	2.40	ļ	2.60		1.65		2.10		2.58	 	2.50		2.75	
D	From plummet to	DESIGNATION	D-1	<u> </u>	D-3		0-1pl		D-3p1		D-5		D-7.5	<u> </u>	D-10	ļ
	POOL WALL AHEAD	KINIHUM	9.88	<u> </u>	10.25		9.00		9.50		10.25		11.00	ļ	13.50	
E	Dn plummet, from	DESIGNATION		E-1		£-3	<u> </u>	E-ipl		E-3p1		E-5	<u> </u>	E-7.5	ļ	E-18
	BOARD TO CEILING	MUMINIM		5.88		5.00		3.59		3.50		3.50	<u> </u>	3,50		5.00
F	CLEAR OVERHEAD	DESIGNATION	F-1	E-1	F-3	E-3	F-1pl	E-1p1	F-3pl	E-3p1	F-5	E-5	F-7.5	E-7.5	F-10	E-18
	behind and each		1		1]		1			1	1	1
	side of plumet	HINIHUM	2.58	5.00	2.50	5.00		3.50	2.75	3.50	2.75	3.58	2.75	3.50	2.75	5.89
6	CLEAR OVERHEAD	DESIGNATION	C-1	E-1	C-3	E-3	6-1pl	E-1p1	6-3pl	E-3p1	6-5	E-5	6-7.5	E-7.5	6-10	E-10
	ahead of plumet	HINIHUH	5.00	5.00	5.00	5.00	5.80	3.50	5.00	3.50	5.00	3.50	5.00	3.50	6.00	5.00
Н	DEPTH OF WATER	DESIGNATION		H-1		H-3		H-1pl		H-3p1		H-5		H-7.5	1	H-10
	at plusset	HINIHUM		3.50	1	3.80		3.30		3.68		3.88		4.50		5.00
J	DISTANCE AND DEPTH	DESIGNATION	J-1	K-1	J-3	K-3	J-1pl	K-1pl	J-3p1	K-3p1	J-5	K-5	J-7.5	K-7.5	J-18	K-18
K	ahead of plummet	HINIHUM	5.88	3.40	6.89	3.70	5.00	3.20	6.00	3.50	6.00	3.78	8.80	4.48	11.00	4.75
L	DISTANCE AND DEPTH	DESIGNATION	L-I	H-1	L-3	N-3	L-1pl	M-1pl	L-3p1	M-3p1	L-5	H-5	L-7.5	H-7.5	L-10	N-18
_ H	each side of pluamet	HINIHUN	1.50	3.40	2.00	3.70		3.20	1.88	3.50	4.25	3.70	4.50	4.48	5.25	4.75
N	MAXIMUN SLOPE TO	POOL DEPTH	30 dec		NOTE		ensions		unnet to		ent plus	set) a	pply for	Platfo	ora	
REDUCE DIMENSIONS CEILING HT 38 degrees				1	wit	h widths	as de	tailed.	For M	ider Pla	tiors	increas	se C by			
beyond full requirements			'	,			f the ad							•		

- (d) Have adequate handholds around the perimeter in pools designed for extended swimming and bathing activity and excluding wave pools; and
 - (e) Stairs, ladders, or stepholes with:
- (i) Stairs, when provided, meeting the following construction requirements:
- (A) Treads of a nonslip finish;
- (B) Stair tread edges colored to contrast with the color of the pool and clearly visible to the users;
- (C) Recessed in pool areas used for lap swimming or provided with wave action; and

- (D) Equipped with handrails extending over the edge of the deck.
 - (ii) Ladders or stepholes which:
- (A) Furnish exit from pools greater than four feet in depth except in landing pools bringing the user toward a shallow area after entering the water;
- (B) Are spaced a minimum of one for every fifty feet of pool perimeter greater than four feet deep;
- (C) Are provided at both sides of the deep end in pools over thirty feet in width; and
- (D) Are equipped with a handrail at the top of both sides extending over the coping or edge of the deck.
 - (iii) User access at the shallow end of pool.
- (6) Owners shall ensure treatment turnover at rates no less than designated as follows:
- (a) In receiving pools for water slides, water tubes, inner tube rides, speed slides or tubes, drop slides or tubes, and kiddie flume slides, treatment turnover time can be based on any of the following:
 - (i) Total attraction volume in one-hour period;
- (ii) Treatment turnover equals design peak usage (maximum users per hour) expressed in gpm;
- (iii) A rate of one hour for 20,000 gallons per two or less attraction segments. Treatment turnover times may increase proportionately for larger pool volumes per two or less attraction segments;
- (iv) Alternative methods where provisions to reduce contaminants are justified to the satisfaction of the department or local health officer; and
 - (v) Treatment turnover times not to exceed six hours.
- (b) For wave pools, a minimum treatment turnover time of two hours; and
- (c) For activity pools, a minimum treatment turnover time of four hours.
 - (7) Owners shall provide pool inlets which are:
- (a) Submerged and located to produce uniform circulation of water and chemicals throughout the pool; and
- (b) Located on the bottoms of pools greater than two thousand five hundred square feet, unless otherwise justified by the engineer to the satisfaction of the department or local health officer.
 - (8) Owners shall provide pool outlets with:
- (a) Overflow and main drain with each designed to carry one hundred percent of total recirculation filter flow;
 - (b) Overflow outlets that have:
- (i) Design to maintain a minimum of sixty percent of filter recirculation flow at all times;
- (ii) An overflow channel on the pool perimeter to promote uniform circulation and skimming action of the upper water layer for pools greater than twenty-five hundred square feet, with:
- (A) Design preventing matter entering channel from returning to the pool;
- (B) Dimensions minimizing the hazard for bathers, such as catching arms or feet in an overflow channel;
 - (C) 0.01 foot slope per foot or more;
- (D) Drains sufficiently spaced and sized to collect and remove overflow water to return line to filter where applicable;

- (E) Size sufficient to carry one hundred percent of the recirculation flow plus the surge flow equivalent to one—fifth of the balancing tank expressed in gallons per minute.
- (iii) Skimmers, when used on pools up to twenty-five hundred square feet, if:
- (A) Demonstrated to operate properly under design conditions:
- (B) Turbulence is not expected to interfere with operation;
- (C) Maximum flow rate through skimmers does not exceed four gpm per inch of weir;
- (D) Devices are recessed in the wall of the pool so that no part protrudes beyond the plane of the wall into the pool;
- (E) The skimmer is equipped with a device to prevent air lock in the recirculation suction line (i.e., an equalizer line); and
- (F) The skimmer is equipped with a removable and cleanable screen designed to trap large solids.
- (iv) Sidewall channels, when used on pools up to twenty-five hundred square feet, which accept the total recirculation volume of the pool through the upper side of the pool if:
- (A) Overall flow through the channel exceeds four times the treatment recirculation rate;
- (B) Design of channel prevents entrapment of the user;
- (C) Openings of any screens have less than one-half inch slots;
- (D) Channel openings do not allow access beyond the pool, except with the use of specific tools requiring their opening:
- (E) Open area of grates prevent a suction or entrapment hazard which could be dangerous to the user; and
- (F) The channel provides an action pulling water from the top of the pool to remove floatable debris and oils.
 - (c) Main drains in all pools with:
 - (i) Location at the low points of the pool;
- (ii) A minimum of two main drains spaced not further than twenty feet apart nor closer than six feet or spaced as far as possible from each other in pools less than six feet linear floor distance;
- (iii) Total open area of grates preventing a suction or entrapment hazard which could be dangerous to user;
 - (iv) Flat grate drains having:
 - (A) Maximum flow of 1.5 feet per second; or
- (B) Net area of outlet being at least four times the area of the discharge pipe.
- (v) Maximum flow of four feet per second in anti-vortex drains;
 - (vi) Openings less than one-half inch in width;
 - (vii) Grate design to withstand forces of users;
 - (viii) Grates removable only with specific tools; and
- (ix) Means to control flow from recirculation pump or balancing tank.
 - (9) Owners shall maintain recirculation flow which:
- (a) Does not exceed six feet per second in suction or valved discharge side of pump; and
- (b) Does not exceed ten feet per second in open discharge pipes on the pressure side of the pump or filter

discharge. This limit does not apply to the return inlet and the last two feet of pipe leading to the inlet.

- (10) Owners shall provide a surge chamber or surge area in RWCFs with an entry pool to:
- (a) Accommodate at least two minutes of the total turnover; and
- (b) Maintain proper water levels for treatment and operation of the attraction.
- (11) Owners having RWCFs with overflow channels requiring balancing tanks shall:
- (a) Maintain volume equivalent to fifteen times maximum bathing load expressed in gallons; and
- (b) Increase capacity as necessary to provide volume for make-up water and to prevent air lock in the pump suction line.
- (12) Owners shall have and maintain recirculation pumps with adequate capacity to:
- (a) Provide design flows and pressure for recirculation of the RWCF water over the entire operating pressure of the filter;
- (b) Allow proper capacity for backwashing of filters when specified; and
- (c) Have self-priming capability when installed above the pool water level.
- (13) Where pumps precede the filter, owners shall install hair and lint strainers, which shall:
 - (a) Be located upstream of recirculation pumps;
- (b) Be of corrosion-resistant material sufficiently strong to prevent collapse when clogged;
 - (c) Have an operable cover; and
- (d) Provide valving to isolate the strainer when located below pool water level.
- (14) Owners shall provide valves at appropriate locations to allow isolation and maintenance of equipment.
 - (15) Owners shall provide equipment rooms which:
- (a) Enclose pumps, disinfection equipment, filters, and other electrical and mechanical equipment and associated chemicals;
- (b) Provide adequate working space and access to perform routine operations;
- (c) Provide lighting and ventilation of the equipment room; and
 - (d) Are not accessible to the public.
- (16) Owners shall ensure the source of make-up water and associated piping in the RWCF:
- (a) Provides sufficient quantity to replace daily losses from the pool;
- (b) Comes from a supply conforming with chapter 248-54 WAC; and
- (c) Prevents cross-connections using a minimum air gap of two pipe diameters or approved backflow prevention devices between the make-up water source and the RWCF attraction water or waste water.
- (17) Owners shall equip RWCFs with filtration equipment which:
- (a) Meets the applicable standards of NSF or equivalent;
- (b) Uses acceptable types and filter rates described in Table 5 of this section:

TABLE 5 FILTER TYPES AND ACCEPTABLE RATES

Range of Acceptable Filter Rate Expressed in gpm/sq. ft.

Type of Filter	Minimum		Maximum*		
Sand Rapid & pressure Pressure high rate Vacuum high rate	10 10		3 18 18		
DE	Continu- ous feed	Manual feed			
Vacuum Pressure	0.8 1.0	1.0 1.35	2.0 2.0		
Cartridge** Applied in temperature ranges: <95°F. >95°F.			0.375 0.188		

Note:

- * Filters sized at maximum application rate shall use flow control valves.
- ** Cartridge filters shall have a nominal micron rating of twenty microns or less.
- (c) Has pressure or vacuum gauges for measuring loss of head (pressure) through the filter with minimum of one gauge preceding and one gauge following the filter;
- (d) Has a flow indicator to measure treatment turnover; and
- (e) Has means of discharging filter backwash to waste with:
- (i) Discharge in a manner not creating a public nuisance;
- (ii) Disposal in accordance with applicable local law or regulation;
- (iii) Minimum air gap of two pipe diameters to prevent cross-connection from waste discharge and recirculation system piping;
- (iv) Discharge receptor and piping of sufficient size to accept backwash water and prevent flooding; and
- (v) Provisions to monitor filter effluent during backwash.
- (18) Owners shall provide disinfection equipment which:
- (a) Provides a continuous and effective residual of disinfectant in the water;
- (b) Uses a disinfectant with a residual that is easily monitored;
- (c) Conforms with NSF standards when liquid or solid feed materials are used;
- (d) Has a design feed rate which will provide effective disinfection levels when RWCFs are in use;
- (e) Meets the following conditions if chlorine gas is used:
 - (i) Chlorine rooms shall:
 - (A) Be above ground level;
- (B) Be constructed so all openings or partitions with adjoining rooms are sealed;
- (C) Be located with consideration of prevailing winds to dissipate leaked chlorine away from the RWCF;

- (D) Have door opening outward only and to the out-of-doors.
- (ii) Mechanical exhaust ventilation of the chlorine room including:
- (A) Air inlet located as far as possible from fan intake to promote good air circulation patterns;
- (B) Minimum of one air change per minute in the chlorine room when fan is operating;
- (C) A remote switch outside the room or a door-activated switch to turn on fan prior to entering;
 - (D) Suction for fan near the floor; and
- (E) Exhaust for fan and chlorinator vent located to prevent contaminating air intakes or prevent undue hazard for the users of the RWCF.
 - (iii) Gas chlorine systems which:
- (A) Are vacuum injection type, with vacuum actuated cylinder regulators; and
- (B) Provide adequate—sized backflow and anti-siphon protection at the ejector.
- (iv) Breathing protection available in an accessible area for the operator outside of the chlorine room including:
- (A) Instructions about limitations with chlorine concentrations and concentrations of oxygen if chlorine type canister masks are used; and
- (B) Self-contained breathing apparatus designed for use in a chlorine atmosphere as preferred equipment for working with chlorine leaks.
- (v) Means for automatic shutoff when the recirculation filter pump is off or flow to the pool is interrupted;
 - (vi) Chlorine gas cylinders shall:
 - (A) Be stored only in chlorine rooms; and
- (B) Not exceed one hundred fifty pounds tare weight per cylinder; except, wave pools, where one-ton cylinders may be used. Only a single, one-ton cylinder shall be stored on the premise at any time.
- (19) Owners applying chemicals other than disinfectant shall provide chemical feed equipment with:
- (a) Adequate size and design to allow routine cleaning and maintenance;
- (b) Materials resistant to action of the chemicals to be used; and
- (c) Means for automatic shut off when the recirculation filter pump is off or flow to the pool is interrupted.
- (20) Owners shall have testing equipment to provide means for measuring disinfectant residuals, pH, alkalinity, and any other chemicals used routinely in the RWCF water. In pools where compressed chlorine gas is used, means to detect leaks shall be provided, i.e., use of proper strength ammonia vapor.
- (21) Owners shall provide easily accessible change room facilities at all RWCFs with:
- (a) Dressing rooms, showers, toilets, urinals, and sinks:
 - (b) Change room design including:
 - (i) Separate facilities for both sexes:
 - (ii) Floors of a nonslip finish with suitable drains;
- (iii) Junctions between walls and floors coved for ease of cleaning;
- (iv) Adequate ventilation to prevent build-up of moisture in the facility; and

- (v) Provisions to minimize cross traffic with nonusers.
- (c) Plumbing fixtures as described in Table 6 of this section.

TABLE 6 MINIMUM PLUMBING FIXTURE REQUIREMENTS BASED ON MAXIMUM PEAK PERIOD OCCUPANCY

				Fixtures Required upancy Load
Тур	e of Fixture	Occupancy/Sex	Male	<u>Female</u>
1.	Toilets	First 600 Portion	1/200	1/100
		exceeding 600	1/450	1/300
2.	Urinals	First 600	1/200	
		Portion		
		exceeding 600	1/450	
3.	Showers	First 300	1/100	1/100
		Portion	•	•
		exceeding 300	1/200	1/200
4.	Sinks	First 400	1/200	1/200
		Next 350	1/350	1/350
		Portion	,	,
		exceeding 750	1/500	1/500
5.	Hose bibs	C	1 accessible rooms	to change
6.	Janitor sink		1 within the	RWCF

- (d) Showers:
- (i) Delivering water at a temperature range between ninety and one hundred ten degrees Fahrenheit; and
- (ii) Providing liquid or powdered soap in nonglass dispensers.
 - (e) Flush toilets and toilet tissue in dispensers;
 - (f) Sinks providing:
 - (i) Tempered or hot and cold running water,
- (ii) Liquid or powdered soap in nonglass dispensers,
 - (iii) Disposable towels or electric hand dryers.
- (g) Sewage disposed of in a manner approved by the department or local health officer; and
- (h) Hose bibs with vacuum breakers provided at convenient locations.
- (22) Owners shall design and maintain lighting at RWCF attractions or change rooms to:
- (a) Illuminate indoor attractions, outdoor attractions used after dusk, or change rooms with a minimum lighting intensity maintained thirty inches above any walking surface, pool deck, or pool area of:
 - (i) Thirty foot-candles at indoor facilities;
 - (ii) Fifteen foot-candles at outdoor facilities; or
 - (iii) Twenty foot-candles in change rooms.
- (b) Allow lifeguards or attendants to clearly see every part of pool waters and walking surfaces; and
- (c) Meet any additional lighting requirements deemed necessary by the department or local health officer.
- (23) Owners shall provide first aid facilities in every RWCF including:
- (a) A twenty-four package first aid kit per WAC 296-24-065;
 - (b) Two or more blankets reserved for emergency use;
- (c) A telephone with a prominently displayed list of emergency medical service response numbers;
- (d) A backboard meeting the specifications of the ARC; and

- (e) Sufficient and suitable area to accommodate persons requiring treatment and necessary first aid equipment.
- (24) Owners shall provide signs at RWCF entrances and change rooms. Any combination of words, pictures, or symbols may be used to convey the following conditions:
- (a) Prohibition of use by persons with communicable diseases;
- (b) Prohibition of use by persons under the influence of alcohol or drugs;
- (c) Requirement for a cleansing shower before entering the attractions;
- (d) Warning that persons refusing to obey the attendants are subject to removal from the premises; and
- (e) Prohibition of food and drink in pool, change room, or on walking surfaces.
- (25) If owners allow or make provision for food service:
- (a) Food and beverage sale and consumption areas shall be separate from pool, change room, and walking surfaces;
 - (b) Trash containers shall be provided; and
- (c) No glass containers shall be allowed in the RWCF.
- (26) Owners shall prevent users or spectators access to mechanical, electrical, or chemical equipment facilities.
- (27) Owners shall provide an operable drinking fountain of the angle jet type design meeting the requirements of the American Standards Association.

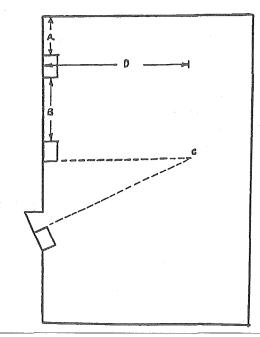
[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–262–060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 88–13–125 (Order 311), § 248–97–070, filed 6/22/88.]

- WAC 246-262-070 Specific design, construction, and equipment. (1) Owners shall provide specific design, construction, and equipment for the various types of RWCF attractions.
- (2) Owners and manufacturers shall ensure adherence to recognized design and construction standards including, but not limited to:
- (a) ASTM F-24 Standards on Amusement Rides and Devices;
- (b) "Suggested Health and Safety Guidelines for Recreational Water Slide Flumes" U.S. Department of Health and Human Services, Centers for Disease Control, Atlanta, Georgia, 30333;
- (c) "World Waterpark Association Considerations for Operating Safety" published by the World Waterpark Association, 7474 Village Drive, Prairie Village, Kansas, 66208; and
- (d) Department recognized or approved guidelines, criteria, or standards.
- (3) Owners shall ensure design and construction for water slides or tubes, inner-tube rides, kiddle flumes, or ramp slides meet the following minimum standards:
 - (a) Flume or tube entry access points shall have:
 - (i) Means to control unauthorized entrance;
- (ii) Handrails or slip-resistant surfaces provided to assist users; and

- (iii) Attendant stations which provide:
- (A) User entry spacing control;
- (B) Attendant line of sight to the attraction; and
- (C) Attendant access to a communication system.
- (b) Receiving pools shall have:
- (i) Clearances and minimum distances as noted in Figure 3 of this section for tube or flume entrances into pools.

		FIG	GURE 3					
MINIMUM	CLEARANCES	FOR	FLUME	OR	TUBE	ENTRY	TO	RE-
CEIVING PO	OOLS							

VALUE	MINIMUM DISTANCE	DESCRIPTION
Α	5 feet	Minimum distance from edge of flume to side of pool.
В	6 feet	Minimum distance between sides of parallel flumes.
С	20 feet	Minimum distance between two flumes or tubes that are not parallel shall be so constructed so that the intersecting lines of each closest side does not intersect for a distance of at least twenty feet from the end of each flume.
D	20 feet	Minimum distance where flume terminates to opposite side of pool.



- (ii) Flume or tube sliding surface ending below the pool operating water level when users ride unaided or on mats;
- (iii) Flume or tube perpendicular for a minimum of ten feet to the wall of entry;
- (iv) Handrails, when steps are provided for exiting;
- (v) Attendant and/or lifeguard stations with:
- (A) Unobstructed access to users; and
- (B) Ready access to communication system for contacting control station attendant and first aid personnel.
- (4) Owners shall design and construct barriers to prevent unauthorized entry or exit from any intermediate pool.

- (5) Owners shall ensure design and construction of speed slides meet the following minimum standards:
- (a) Entry points conforming with subsection (3)(a) of this section;
- (b) Roller- or sled-type slides designed to prevent accidental flipping of the sleds or coasters when entering the water;
- (c) Provision of sufficient transition zones for deceleration preventing unsafe user impact; and
- (d) Maintenance of critical water operation levels providing proper braking action of the user.
- (6) Owners shall ensure design and construction of wave pools meet the following minimum standards:
- (a) Walls of wave pools shall be vertical with minimum six inch radius of curvature between wall and pool bottom;
 - (b) Pool bottom sloped:
- (i) Not exceeding one foot of drop in twelve feet of run where pool depths range from zero to three and one half feet; or
- (ii) Not exceeding one foot of drop in nine feet of run where depths range from three and one-half feet to six and one-half feet.
- (c) Recessed ladders or step holes with vertical grab bars at depths above three and one-half feet:
 - (i) For emergency exit only;
- (ii) Spaced at intervals of fifty feet or less where pool water depths are greater than three and one-half feet. Pool water depths are measured without wave action.
- (d) Deck width of at least ten feet along the shallow end:
- (e) A fence or restrictive barrier a minimum of forty—two inches in height and at least two feet out from the pool/deck interface at the side walls of wave pools, with emergency exit openings.
- (f) Lifeguard station locations appropriate to prevailing conditions;
- (g) A push-button system to shut off the wave-making equipment with:
- (i) Shut offs installed on sidewall decks and spaced at intervals no greater than one hundred feet, readily accessible to the lifeguards; and
 - (ii) Shock hazard protection.
- (h) A communication system for use by authorized personnel which is clearly audible to all portions of the pool;
- (i) A communication system for interaction between authorized personnel; and
- (j) Maximum bathing load (users) not to exceed a value equal to S/12 + D/68 where:
- (i) "S" equals surface area in square feet where depth is less than three and one-half feet;
- (ii) "D" equals surface area in square feet where pool depth is three and one-half feet deep or greater; and
 - (iii) Pool depths are measured without wave action.
- (7) If inner tubes, boogie boards, or surf boards are used, the owner shall ensure the design and operation of the wave pool provides for such activity, including:
 - (a) The establishment of rules for use;
 - (b) Operating and emergency procedures; and
 - (c) Crowd control.

- (8) Owners shall ensure design and construction of any wading activity pool meets the following minimum standards. Wading activity pool areas are:
 - (a) Built with maximum water depth of two feet;
- (b) Constructed with pool walls so that distance from deck to water level is six inches or less for at least seventy-five percent of the pool perimeter;
- (c) Equipped with floors uniformly sloped to drain with a maximum slope of one foot of drop in twelve feet of run;
- (d) Separated by at least a four foot high barrier when distance to any water area greater than four feet in depth is less than ten feet; and
- (e) Protected from water areas greater than two feet by providing:
 - (i) A float line separating the two areas;
- (ii) A six inch contrasting color line on pool bottom and side walls at float line; and
- (iii) A transition zone with a maximum floor slope not exceeding one foot of drop in twelve feet of run.
- (9) Owners shall ensure design and construction of drop slides or drop tubes meet the following minimum standards:
- (a) Entry in accordance with subsection (3)(a) of this section;
 - (b) Receiving pool envelope:
- (i) Conforming to CNCA standards noted in WAC 248-97-070 (5)(c)(vi)(A) if the point of exit is less than one-half meter (or twenty inches);
- (ii) Conforming to FINA standards noted in WAC 248-97-070 (5)(c)(vi)(B) if the point of exit is one-half meter (or twenty inches) or greater.
- (iii) Increasing in size to ensure user safety if warranted by angle of entry or speed of the user.
- (c) Sufficient distance between slides or tubes to prevent collisions of users. Parallel exits are recommended.
- (d) Direct line of sight and direct communication between entry access point and receiving pool.
- (10) Owners shall provide signs for specific RWCF attractions. Words, pictures, or symbols may be used to convey the following as appropriate:
- (a) Prohibition of running, standing, kneeling, tumbling, horseplay, or stopping in the flumes or tubes;
- (b) Failure to follow directions of attendant or failure to obey posted rules may result in removal from the RWCF;
 - (c) Prohibition of diving from flume;
- (d) Prohibition of multiple user chains if applicable to ride;
- (e) Requirement to leave the landing area promptly after exiting;
- (f) Recommended minimum or maximum age or height for using this attraction; and
- (g) Prohibition of head first sliding if applicable to ride.
 - (h) Additional information on wave pools including:
 - (i) Warning that wave pools can be very tiring;
- (ii) Warning for small children and poor swimmers to use personal flotation devices in designated areas;
 - (iii) Requirement for adult supervision for children;

- (iv) Prohibition of diving, jumping, or entering from sides of pool; and
- (v) Prohibition of using surf boards during periods of general public use.
- (11) If the proposed attraction design is not addressed by or exceeds limitations of standards and guidelines specified by this section, owners shall submit:
- (a) Justification to the department or local health officer prepared by an engineer; and
- (b) Information on the construction, maintenance, and operation of the proposed attraction.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–262–070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 88–13–125 (Order 311), § 248–97–080, filed 6/22/88.]

- WAC 246-262-080 Operation. (1) Owners shall ensure proper operation to protect the public health and safety of the users and the water quality of the RWCF.
- (2) Owners shall prepare and use an operations manual for the RWCF.
- (3) Owners shall routinely inspect, maintain, and repair the physical components to:
- (a) Ensure all structural facilities are intact and free from corrosion, wear, or stress;
 - (b) Prevent water ponding on walking surfaces;
- (c) Ensure equipment is available and operable including:
 - (i) Disinfection, filtration, and related equipment;
 - (ii) Lifesaving equipment; and
 - (iii) Communication systems.
- (4) Owners shall ensure user health and safety by adequately staffing the RWCF during operation. Staffing shall include:
- (a) Advanced first aid personnel at all times facility is open to the public;
- (b) Lifeguards and/or attendants as appropriate at all times facility is open to the public; and
 - (c) Water treatment operator as needed.
- (5) Owners shall ensure each type of personnel performs the following duties:
- (a) Advanced first aid personnel shall provide emergency medical treatment;
- (b) Lifeguard shall have sole responsibility for guarding users in area assigned;
- (c) Attendants shall have sole responsibility for assuring proper user control in areas assigned; and
- (d) Water treatment operator shall oversee water treatment operations and conduct necessary water quality monitoring.
- (6) Owners shall ensure each type of personnel meets the designated training requirements:
 - (a) Advanced first aid personnel with:
- (i) A current advanced first aid certification or equivalent or higher levels of training including:
 - (A) First responder;
 - (B) Emergency medical technician; or
 - (C) Paramedic.
- (ii) Training on management of spinal injuries in the aquatic environment if lifeguards with lifeguard training are not at the RWCF.

- (b) Lifeguards with a current lifeguard certificate through any of the recognized programs in the definition (WAC 248-97-020(23));
- (c) Attendants with training determined appropriate by the owner to respond to user safety needs at the attractions, and:
- (i) Attendants stationed at shallow pool facilities (less than four feet water depth) with documented training regarding their response in at least the following:
- (A) Safety instruction on basic methods of water rescue, reaching, and extension assists;
- (B) Cardiopulmonary resuscitation (CPR) and airway management;
 - (C) Basic bleeding control;
 - (D) Basic fracture management; and
- (E) Specific instruction on management of spinal injuries related to the aquatic environment.
- (ii) Attendants stationed at entry access areas with basic training including:
- (A) Controlling and supervising users in areas where attendant is responsible;
- (B) Controlling timing of user entry rate where appropriate;
 - (C) Use of communication systems; and
- (D) Knowledge of CPR by at least one attendant on duty.
- (d) Water treatment operators knowledgeable in pool water chemistry, filters, and pumping equipment; and
- (e) When gas chlorine is used, the manager or the operator with specific training in:
- (i) Proper operation and maintenance procedures of the chlorination equipment;
- (ii) Physical and chemical properties of chlorine gas under pressure;
 - (iii) Use of emergency safety equipment; and
- (iv) Proper first aid procedures and response for accidental inhalation of chlorine gas and leaks.
- (7) Owners shall ensure adequate emergency response with:
- (a) Lifeguards (and attendants where appropriate) located to provide a response time not to exceed thirty seconds to all users in pools;
- (b) Backup lifeguard (or attendant where appropriate) provisions so response time is maintained during multiple rescues;
- (c) Lifeguards at all pools. Attendants may substitute for lifeguards at pools less than four feet in depth which:
- (i) Are strictly used as receiving pools for attractions where users leave the pool immediately after entering; or
 - (ii) Are strictly used for wading activity; and
- (iii) Attendants meet the training requirements specified in subsection (6)(c)(i) of this section.
- (d) Provisions for emergency response drills to meet the response time and actions noted in WAC 248-97-090 including:
 - (i) Drills at least twice each operating season; and
 - (ii) Documentation of testing.
- (8) Owners shall regulate activities of users and spectators including:
- (a) Requirement to obey RWCF rules related to health and safety; and

- (b) Warning that failure to comply with rules constitutes grounds for exclusion from the premises or management action as necessary.
- (9) Owners shall ensure RWCF user control in specific attractions by requiring:
- (a) On speed slides, completion of the ride by one user before allowing another user to enter:
- (b) On ramp slides, clearing of the slide by one group prior to second group entering; and
- (c) On drop slide or tube, clearing of the pool entry area prior to allowing another user to enter.
- (10) Owners shall monitor various environmental conditions which affect facility safety. Weather conditions, including electrical storms, fog, wind, sun glare creating visibility problems, and other such factors shall be evaluated. Appropriate action shall be taken in response to these factors to ensure user safety.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–262–080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 88–13–125 (Order 311), § 248–97–090, filed 6/22/88.]

WAC 246-262-090 Monitoring, reporting, and record keeping. (1) Owners shall:

- (a) Provide information requested by the department or local health officer for statewide injury and illness surveillance reports; and
- (b) Notify the department or local health officer within forty-eight hours of any drowning, near drowning, death, or serious injury or illness occurring at the RWCF.
- (2) Owners shall monitor and maintain records on the following for at least three years:
 - (a) Water quality conditions including:
- (i) Testing for residual disinfectant concentration three or more different periods daily, except once a day if electronic monitoring and control equipment is provided;
 - (ii) Hydrogen ion (pH) concentration tested daily;
 - (iii) Alkalinity monitored at least weekly;
- (iv) Any other chemical added to water including alum, algicides, cyanurate compounds, acid, and alkalinity compounds, etc.;
 - (v) Pressure or vacuum gauge readings; and
- (vi) Any gross contamination to the water (i.e., vomiting, feces, etc.).
- (b) Routine preventive maintenance provided on all hazardous equipment, e.g., gas chlorination equipment;
 - (c) Number of users of the facility; and
- (d) Credentials, training, and/or certifications required for personnel per WAC 248-97-090 of this chapter.
- (3) Owners shall notify the department in the event an incident occurs with a chemical creating a problem of health or safety significance (e.g., chlorine gas leak).
- (4) Owners shall make records available for department review upon request.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–262–090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 88–13–125 (Order 311), § 248–97–100, filed 6/22/88.]

- WAC 246-262-100 Inspection. (1) Owners shall permit the department or local health officer to perform on-site inspections as necessary in the discretion of the enforcing agency to ensure compliance with standards in chapter 70.90 RCW and chapter 248-97 WAC.
- (2) Employees of the enforcing agency shall provide appropriate identification when entering for purpose of routine inspections.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–262–100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 88–13–125 (Order 311), § 248–97–110, filed 6/22/88.]

WAC 246-262-110 Advisory committee. The RWCF advisory committee shall:

- (1) Perform functions as specified in accordance with RCW 70.90.130;
 - (2) Meet at least one time each year;
- (3) Be composed of representatives as specified in RCW 70.90.130 appointed to staggered two-year terms, the representative from the department shall not be subject to these conditions;
 - (4) Select a chairperson every two years;
- (5) Establish department representative as ongoing secretary of the advisory committee; and
- (6) Present an annual report to the board summarizing committee activities.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–262–110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 88–13–125 (Order 311), § 248–97–120, filed 6/22/88.]

WAC 246-262-120 Enforcement. (1) The department or, if enforcement responsibility has been assigned under a joint plan of operation, the local health officer:

- (a) Shall enforce the rules of chapter 248-97 WAC;
- (b) May refer cases within their jurisdiction to the local prosecutor's office or office of the attorney general, as appropriate.
- (2) When a RWCF is in violation of provisions of chapter 70.90 RCW or the rules of chapter 248-97 WAC, appropriate enforcement action may be initiated by the department, local health officer, local prosecutor's office, or office of the attorney general. Enforcement actions may include any one or a combination of the following:
- (a) Informal administrative conferences, convened at the request of the department, local health officer, or owner, to explore facts and resolve problems;
- (b) Orders directed to the owner and/or operator of the RWCF and/or the person causing or responsible for the violation of the rules of chapter 248-97 WAC;
- (c) Imposition of civil penalties of up to five hundred dollars per violation per day as authorized under RCW 70.90.200;
- (d) Denial, suspension, or revocation of operating permits; and
- (e) Civil or criminal action initiated by the local prosecutor's office or by the office of the attorney general.
- (3) Orders authorized under this section include, but are not limited to, the following:

- (a) Orders requiring corrective measures necessary to effect compliance with chapter 248-97 WAC or chapter 70.90 RCW. Such orders may or may not include a compliance schedule; and
- (b) Orders to stop work and/or refrain from using any RWCF or portion thereof or improvement thereto until all permits, certifications, and approvals required by statute or rule are obtained.
 - (4) An order issued under this section shall:
 - (a) Be in writing;
- (b) Name the facility and the person or persons to whom the order is directed;
- (c) Briefly describe each action or inaction constituting a violation of chapter 70.90 RCW or the rules of chapter 248-97 WAC;
- (d) Specify any required corrective action or forbearance together with a schedule for completing such corrective action, if applicable;
- (e) Provide notice, as appropriate, that continued or repeated violation may subject the violator to:
 - (i) Civil penalties of up to five hundred dollars;
- (ii) Denial, suspension, or revocation of the facilities operating permit; or
- (iii) Referral to the office of the county prosecutor or attorney general.
- (f) Provide the name, business address, and phone number of an appropriate staff person who may be contacted in regard to an order.
 - (5) Service of an order shall be made:
 - (a) Personally, unless otherwise provided by law; or
 - (b) By certified mail return receipt requested.
- (6) Under such rules or policies as the department or local health officer may adopt, civil penalties of up to five hundred dollars per violation per day may be assessed against any person violating the provisions of chapter 70.90 RCW or chapter 248–97 WAC.
- (7) The department or local health officer shall have cause to deny the application or reapplication for an operating permit or to revoke or suspend a required operating permit of any person who has:
 - (a) Previously had:
 - (i) An operating permit suspended or revoked; or
- (ii) An application for an operating permit denied for any reason whether in this state or any other state.
- (b) Failed or refused to comply with the provisions of chapter 70.90 RCW, chapter 248-97 WAC, or any other statutory provision or rule regulating the construction or operation of a RWCF; or
- (c) Obtained or attempted to obtain an operating permit or any other required certificate or approval by fraudulent means or misrepresentation.
- (8) For the purposes of subsection (7) of this section, a person shall be defined to include:
 - (a) Applicant;
 - (b) Reapplicant;
 - (c) Permit holder; or
- (d) Any individual associated with subsection (8)(a), (b), or (c) of this section including, but not limited to:
 - (i) Board members,
 - (ii) Officers,

- (iii) Managers,
- (iv) Partners,
- (v) Association members,
- (vi) Employees,
- (vii) Agents, and in addition
- (viii) Third persons acting with the knowledge of such persons.
- (9) The department or local health officer may summarily suspend an operating permit, other required permit, license, or certification without a prior hearing if the department or local health officer:
- (a) Finds that public health, safety, or welfare imperatively requires emergency action; and
- (b) Incorporates a finding to that effect in its notice or order.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–262–120, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 34.05 RCW and RCW 70.90.120. 90–06–049 (Order 040), § 248–97–130, filed 3/2/90, effective 3/2/90. Statutory Authority: RCW 70.90.120. 88–13–125 (Order 311), § 248–97–130, filed 6/22/88.]

- WAC 246-262-130 Notice of decision—Adjudicative proceeding. (1) A hearing requested to contest a local health officer's action shall be governed by the local health jurisdiction's rules for hearings.
- (2)(a) The department's notice of a denial, suspension, modification, or revocation of a license shall be consistent with RCW 43.20A.205, as applicable to the department of health under RCW 43.70.900. An applicant or license holder has the right to an adjudicative proceeding to contest the decision.
- (b) A department notice of imposition of a civil fine shall be consistent with RCW 43.20A.215, as applicable to the department of health under RCW 43.70.900. A person the department imposes a civil fine on has the right to an adjudicative proceeding to contest the decision.
- (c) A license applicant or holder or a person the department imposes a fine on contesting a department decision shall within twenty-eight days of receipt of the decision:
- (i) File a written application for an adjudicative proceeding by a method showing proof of receipt with the Office of Appeals, P.O. Box 2465, Olympia, WA 98504; and
 - (ii) Include in or with the application:
- (A) A specific statement of the issue or issues and law involved;
- (B) The grounds for contesting the department decision; and
 - (C) A copy of the contested department decision.
- (d) The proceeding is governed by the Administrative Procedure Act (chapter 34.05 RCW), this chapter, and chapter 248–08 WAC. If a provision in this chapter conflicts with chapter 248–08 WAC, the provision in this chapter governs.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–262–130, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 34.05 RCW and RCW 70.90.120. 90–06–049 (Order 040), § 248–97–135, filed 3/2/90, effective 3/2/90.]

- WAC 246-262-140 Insurance. (1) As a condition of obtaining and maintaining a valid operating permit, owners shall provide evidence of having liability insurance.
- (2) The minimum amount of liability insurance required shall be one hundred thousand dollars combined single limit. The coverage for this insurance shall include:
- (a) Bodily injury or death of one or more persons in any one incident from the use of the RWCF.
- (b) Tail coverage shall be required twenty-four months beyond the insured period on a "claims made" form of insurance.
- (3) A certificate of insurance shall be provided to the department or local health officer at the time of application for operating permit subject to the approval of the risk manager of the state of Washington.
- (4) The liability insurance company shall provide the department or local health officer a thirty—day prior notice of cancellation, alteration, or nonrenewal. This condition shall be stated in the certificate.
- (5) If the owner's insurance is cancelled, the operating permit is void and the owner shall cease operation of the RWCF until required insurance is obtained and a valid operating permit is reinstated by the department or local health officer.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-262-140, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 88-13-125 (Order 311), § 248-97-140, filed 6/22/88.]

WAC 246-262-150 Compliance. Existing RWCFs not complying with the design, construction, and equipment requirements outlined in WAC 248-97-070 and 248-97-080 of these regulations may continue in use, provided the facility is operated in continuous compliance of the safety, sanitation, and water quality provisions of chapter 248-97 WAC as outlined in WAC 248-97-060, 248-97-090, 248-97-100, and 248-97-140.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-262-150, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 88-13-125 (Order 311), § 248-97-150, filed 6/22/88.]

WAC 246-262-160 Variance. The board may grant a variance from requirements of chapter 248-97 WAC if, in the sole discretion of the board, data and/or research provides sufficient evidence that the RWCF (attraction, device, equipment, procedure, etc.), will adequately protect public health and safety, as well as water quality.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-262-160, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 88-13-125 (Order 311), § 248-97-160, filed 6/22/88.]

WAC 246-262-170 Innovations—Substitutions. The board authorizes the department:

(1) To review new innovations, and if accepted for use, prepare appropriate amendments to chapter 248-97 WAC.

(2) To allow substitution of equipment, facilities, or procedures required by chapter 248-97 WAC when, in the sole discretion of the department, data and/or research provide sufficient evidence that such substitution is equivalent to the requirement and will adequately provide for the protection of the public health and safety of persons using the RWCF.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-262-170, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. 88-13-125 (Order 311), § 248-97-170, filed 6/22/88.]

- WAC 246-262-990 Fees. (1) The fee for plan review of a new recreational water contact facility containing a single attraction shall be two hundred dollars plus the safety engineer reviewer's cost as billed.
- (2) The fee for plan review of a new recreational water contact facility containing more than one attraction shall be two hundred dollars plus the cost of the safety engineer reviewer's cost as billed plus seventy—five dollars for each attraction.
- (3) The fee for review of plans for alterations or modifications of an existing recreational water contact facility shall be the total of direct and indirect costs, not to exceed one—half of the fee for review of a new project.
- (4) The annual fee for an operating permit for a recreational water contact facility containing one attraction shall be one hundred seventy—five dollars.
- (5) The annual fee for an operating permit for a recreational wafer contact facility containing more than one attraction shall be one hundred seventy—five dollars for the first attraction plus fifty dollars for each additional attraction up to a maximum fee of three hundred twenty—five dollars.
- (6) The department may charge an additional fee of fifty dollars plus associated laboratory costs for inspections beyond those provided under the annual operating permit when necessary due to violations of such items as:
 - (a) Noncompliance with water quality standards; and
- (b) Failure to comply with operational requirements for health and safety.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-262-990, filed 12/27/90, effective 1/31/91.]

Chapter 246–264 WAC WATER SAFETY TEACHING STATIONS

246-264-010	Definitions.
246-264-020	Scope of chapter—Size and depth.
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246-264-040	Drinking fountain.
246-264-050	Plans and specifications—Approval—Notice to local
	health officer.
246-264-060	Toilet facilities.
246-264-070	Location.
246-264-080	Enclosure and cover.
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246-264-120	Water quality.
246-264-130	Chlorine content.
246-264-140	Water recirculation.
246-264-150	Operation and sanitary control.

WAC

246-264-160 Bath house. 246-264-170 First aid. 246-264-180 Emergency telephone list. 246-264-190 Telephone required.

246–264–200 Health menace prohibited.

WAC 246-264-010 Definitions. The term "water safety teaching station" shall mean an artificial pool of water having a depth of twenty-four to thirty-six inches, owned or operated by a public school, a municipality or one of its political subdivisions, together with the appurtenances in connection therewith, which is used to teach water safety and which may be portable.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-264-010, filed 12/27/90, effective 1/31/91; Order 34, § 248-132-010, filed 6/26/70.]

WAC 246-264-020 Scope of chapter—Size and depth. Water safety teaching stations not more than thirty—six inches in depth and having a surface area not greater than eight hundred square feet shall comply with the requirements of this chapter. Water safety teaching stations deeper than thirty—six inches or larger than eight hundred square feet shall comply with the requirements for public pools.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-264-020, filed 12/27/90, effective 1/31/91; Order 34, § 248-132-020, filed 6/26/70.]

WAC 246-264-030 Approval for construction. The design, construction, and equipment of a water safety teaching station must be approved by the division of health of the department of social and health services, and shall meet the requirements of WAC 248-98-050 (1); (2); (11)(c), (d), (g), (h), (i), (j2), (k), (l), (13 as applied to semipublic pools), (17), and (24).

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-264-030, filed 12/27/90, effective 1/31/91; Order 34, § 248-132-030, filed 6/26/70.]

WAC 246-264-040 Drinking fountain. A drinking fountain shall be provided in the vicinity of the pool.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-264-040, filed 12/27/90, effective 1/31/91; Order 34, § 248-132-040, filed 6/26/70.]

WAC 246-264-050 Plans and specifications—Approval—Notice to local health officer. Plans and specifications for sites and appurtenances for water safety teaching stations shall be submitted to and receive the approval of the assistant secretary, division of health. Subsequently, the local health officer shall be notified thirty days prior to moving the pool to a new location so that a site inspection can be made by the local health officer: Provided, That one day's notice is sufficient when the pool is moved to a site previously and currently approved by the local health department.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-264-050, filed 12/27/90, effective 1/31/91; Order 34, § 248-132-050, filed 6/26/70.]

WAC 246-264-060 Toilet facilities. Toilet facilities shall be provided and be readily accessible to the bathers. A minimum of one toilet for each sex shall be provided.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–264–060, filed 12/27/90, effective 1/31/91; Order 34, § 248–132–060, filed 6/26/70.]

WAC 246-264-070 Location. Water safety teaching stations shall be so located that an impervious or washable and nonslip surface is immediately adjacent to and circumscribes the pool.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-264-070, filed 12/27/90, effective 1/31/91; Order 34, § 248-132-070, filed 6/26/70.]

WAC 246-264-080 Enclosure and cover. Unless housed in a building or other protective structure, the water safety teaching station shall be enclosed by a suitable fence or barrier to restrict entrance of unauthorized persons, and shall be covered when not in use.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as 246-264-080, filed 12/27/90, effective 1/31/91; Order 34, 248-132-080, filed 6/26/70.]

WAC 246-264-090 Rinsing shower. From September through May, a rinsing shower with hot and cold water shall be provided and required for all bathers.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-264-090, filed 12/27/90, effective 1/31/91; Order 34, § 248-132-090, filed 6/26/70.]

WAC 246-264-100 Foot rinse. A foot rinse or spray shall be used at the entrance to the pool at outdoor locations.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–264–100, filed 12/27/90, effective 1/31/91; Order 34, § 248–132–100, filed 6/26/70.]

WAC 246-264-110 Number of bathers permitted. The maximum number of bathers permitted within the pool enclosure of water safety teaching stations at any time shall not exceed one bather for each twenty square feet of water surface area.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-264-110, filed 12/27/90, effective 1/31/91; Order 34, § 248-132-110, filed 6/26/70.]

WAC 246-264-120 Water quality. The water in water safety teaching stations at all times while in use shall meet the requirements pertaining to water quality as outlined in WAC 248-98-030; except, that the turbidity shall not exceed 0.5 JTU (Jackson Turbidity Unit).

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-264-120, filed 12/27/90, effective 1/31/91; Order 34, § 248-132-120, filed 6/26/70.]

WAC 246-264-130 Chlorine content. A free chlorine residual of not less than 1.0 parts per million shall be maintained throughout the pool during periods of use.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-264-130, filed 12/27/90, effective 1/31/91; Order 34, § 248-132-130, filed 6/26/70.]

WAC 246-264-140 Water recirculation. Water safety teaching stations shall be so operated that the entire volume of the pool shall be recirculated in not more than four hours. Recirculation facilities shall comply with WAC 248-98-050 (10)(b) for either public or semipublic pools.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-264-140, filed 12/27/90, effective 1/31/91; Order 34, § 248-132-140, filed 6/26/70.]

WAC 246-264-150 Operation and sanitary control. In the operation of water safety teaching stations, the requirement pertaining to operation and sanitary control of swimming pools as outlined in WAC 248-98-060 (1), (2), (3), (5), (6), (7), (8), (10) and (12) shall apply.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-264-150, filed 12/27/90, effective 1/31/91; Order 34, § 248-132-150, filed 6/26/70.]

WAC 246-264-160 Bath house. Bath house floors and appurtenances as well as walkways shall be scrubbed and kept visibly clean at all times. They shall be disinfected with chlorine solution or other germicides at least daily.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-264-160, filed 12/27/90, effective 1/31/91; Order 34, § 248-132-160, filed 6/26/70.]

WAC 246-264-170 First aid. Water safety teaching stations shall be equipped with a standard twenty-four-unit first aid kit, which shall be kept filled and readily accessible for emergency use; and two or more blankets reserved for emergency use.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-264-170, filed 12/27/90, effective 1/31/91; Order 34, § 248-132-170, filed 6/26/70.]

WAC 246-264-180 Emergency telephone list. A telephone number list to include the nearest available doctor, ambulance service, hospital, and police or fire department rescue unit shall be prominently displayed immediately adjacent to the telephone.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–264–180, filed 12/27/90, effective 1/31/91; Order 34, § 248–132–180, filed 6/26/70.]

WAC 246-264-190 Telephone required. A noncoin operated telephone shall be readily accessible at all pool locations.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–264–190, filed 12/27/90, effective 1/31/91; Order 34, § 248–132–190, filed 6/26/70.]

WAC 246-264-200 Health menace prohibited. No water safety teaching station shall be maintained or operated when such pool is determined by the local health officer, subject to the review of the assistant secretary, division of health, to constitute a menace to health.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–264–200, filed 12/27/90, effective 1/31/91; Order 34, § 248–132–200, filed 6/26/70.]

Chapter 246-270 WAC

SEWER SYSTEMS--CERTIFICATION OF NECESSITY FOR WATER DISTRICT INVOLVEMENT

WAC	
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WAC 246-270-001 Purpose. This regulation prescribes the procedure whereby a water district organized under the provisions of chapter 57.04 RCW may apply for and receive an approval and a certification of necessity from the department in accordance with the provisions of RCW 57.08.065 in order to exercise powers of a sewer district in accordance with the provisions of Title 56 RCW, as now, or hereafter amended. Additionally, this regulation will define the criteria which the department will consider in determining the eligibility of an applicant water district for an approval and a certification of necessity.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–270–001, filed 12/27/90, effective 1/31/91; Order 6, § 248–91–020, filed 10/16/68; Emergency Order 3, § 248–91–020, filed 8/2/68.]

WAC 246-270-010 Definitions. For purposes of this chapter, the following definitions are applicable:

- (1) "Department" shall mean the Washington state department of health.
- (2) "Board" shall mean the Washington state board of health.
- (3) "Approval and a certification of necessity" shall mean an order of the department which gives approval to a water district to establish, maintain, construct and operate a sewer system in a proposed service area in accordance with RCW 57.08.065.
- (4) "Necessity" shall mean a reasonable need and not mean an indispensable need.
- (5) "Proposed service area" shall mean the area proposed to be served with a sewer system by the applicant water district.
- (6) "Sewer system" shall mean a system of sewers and appurtenances for the collection, transportation, treatment and disposal of sewage and industrial wastes.
- (7) "Sewage" shall mean the water-carried waste products or discharge from human beings or other wastes from residences, public or private buildings, or industrial plants, together with such ground, surface or storm waters as may be present.

- (8) "Industrial wastes" shall mean the liquids, solids, or other wastes resulting from any process of industry, or from the development of any natural resource.
- (9) "Drainage basin" shall mean a geographic area drained by a surface stream or body of impounded water together with all tributary surface streams and bodies of impounded surface water.
- (10) "Sewer entities" shall mean any municipal or public corporations which by law are entitled to construct and operate a sewer system.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-270-010, filed 12/27/90, effective 1/31/91; Order 6, § 248-91-010, filed 10/16/68; Emergency Order 3, § 248-91-010, filed 8/2/68.]

- WAC 246-270-020 Application content. An application for an approval and a certification of necessity must be presented to the department and shall include, but not be limited to, the following considerations:
- (1) A general statement of the present and future sewage problems in the proposed area of service.
- (2) A consideration of the relationship of the district to contiguous, nearby or overlapping sewer entities.
- (3) Service areas considering reasonable drainage basin oriented planning.
- (4) Population forecasts as a basis of sewer system design in the proposed service area.
- (5) A layout map showing major trunk lines and interceptor lines including the drainage area to be served within and outside of the boundaries of the water district.
- (6) The methods of interception and disposal of sewage.
- (7) The projected completion time for the sewer system.
- (8) An affidavit signed by an officer of the applicant water district, stating that all persons, parties or entities have been given the notice required by WAC 248-91-040.
- (9) A summary setting forth the reasons why the applicant water district is better suited to provide a sewer system within the proposed service area than a contiguous or adjacent sewer entity.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–270–020, filed 12/27/90, effective 1/31/91; Order 6, § 248–91–030, filed 10/16/68; Emergency Order 3, § 248–91–030, filed 8/2/68.]

WAC 246-270-030 Notification of interested parties. Prior to the submission of an application to the department for an approval and a certification of necessity, an applicant water district shall:

(1) Notify all the contiguous and affected sewer entities in the area in which the water district is proposing to construct and operate a sewer system that the applicant water district will submit an application for an approval and a certification of necessity, and that the department will consider all written comments and objections submitted to the department from any contiguous and affected sewer entity if the same written comments and objections are received by the department before a date which will be specified by the department.

- (2) Notify the county commissioners, county health officer, county engineer, county planning commission and the county boundary review board, if any, in the county of the proposed service area, that the applicant water district will submit an application for an approval and certification of necessity and the department will consider all written comments and objections submitted to the department by any of the same if the written comments and objections are received by the department before a date which will be specified by the department.
- (3) The dates for inclusion in the notification provided for in paragraphs (1) and (2) hereof will be furnished by the department upon the request of any applicant water district to the department.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–270–030, filed 12/27/90, effective 1/31/91; Order 6, § 248–91–040, filed 10/16/68; Emergency Order 3, § 248–91–040, filed 8/2/68.]

- WAC 246-270-040 Criteria for necessity. The department will issue an approval and a certification of necessity to an applicant water district if all of the following conditions are satisfied:
- (1) The granting of an approval and a certification of necessity will eliminate or alleviate an existing or imminent health problem as determined by the department.
- (2) A sewer system does not exist in a substantial portion of the proposed service area and no regularly constituted and established sewer entity intends to construct and operate a sewer system in a substantial portion of the proposed service area within the reasonably foreseeable future.
- (3) The proposed service area conforms to any or all established sewage drainage basins designated pursuant to RCW 90.48.270.
- (4) The proposed service area conforms to any or all established comprehensive plans for sewage drainage basins, established pursuant to RCW 90.48.280.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–270–040, filed 12/27/90, effective 1/31/91; Order 6, § 248–91–050, filed 10/16/68; Emergency Order 3, § 248–91–050, filed 8/2/68.]

- WAC 246-270-050 Notice of decision—Adjudicative proceeding. (1) The department's notice of a denial, suspension, modification, or revocation of an approval and certificate of necessity shall be consistent with RCW 43.20A.XXX and section 95, chapter 175, Laws of 1989. An applicant or certificate holder has the right to an adjudicative proceeding to contest the decision.
- (2) A certificate applicant or holder contesting a department certificate decision shall within twenty-eight days of receipt of the decision:
- (a) File a written application for an adjudicative proceeding by a method showing proof of receipt with the Office of Appeals, P.O. Box 2465, Olympia, WA 98504; and
 - (b) Include in or with the application:
- (i) A specific statement of the issue or issues and law involved;
- (ii) The grounds for contesting the department decision; and

(iii) A copy of the contested department decision.

(3) The proceeding is governed by the Administrative Procedure Act (chapter 34.05 RCW), this chapter, and chapter 248–08 WAC. If a provision in this chapter conflicts with chapter 248–08 WAC, the provision in this chapter governs.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-270-050, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 34.05 RCW, RCW 34.05.220 (1)(a) and 1st ex.s. c 9 § 106.90-06-019 (Order 039), § 248-91-060, filed 2/28/90, effective 3/1/90; Order 6, § 248-91-060, filed 10/16/68; Emergency Order 3, § 248-91-060, filed 8/2/68.]

WAC 246-270-060 Limitation of an approval and a certification of necessity. The granting of an approval and a certification of necessity by the department shall only constitute approval to establish, maintain, construct, and operate a sewer system within the proposed service area requested in the initial application for an approval and a certification of necessity, and shall in no way constitute approval or authority to establish, maintain, construct and operate a sewer system in any area which may be annexed at some future time by the applicant water district.

The granting of an approval and a certification of necessity by the department does not constitute approval of the engineering report or plans and specifications of any sewer system, and all plans and specifications and the proposed method of operation and maintenance for any sewer system must be approved by the department pursuant to WAC 248-92-040.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-270-060, filed 12/27/90, effective 1/31/91; Order 6, § 248-91-070, filed 10/16/68.]

WAC 246-270-990 Fees. The minimum fee for required written approval and certification of necessity shall be two hundred dollars. If review time exceeds four hours, fifty dollars for each additional hour or part of an hour shall be added to the minimum fee.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-270-990, filed 12/27/90, effective 1/31/91.]

Chapter 246-271 WAC PUBLIC SEWAGE

WAC	
246-271-010	Definitions.
246-271-020	Prohibited methods of sewage disposal.
246-271-030	Investigative and order powers of director.
246-271-040	Plans for sewerage systems.
246-271-050	Plans for sewage treatment works.
246–271–060	Plans for sewage treatment works—Requirements for engineers.
246-271-070	Operation of sewage treatment plants—Efficiency.
246-271-080	Operation of sewage treatment plants—Freedom from sand and silt.
246-271-090	Operation of sewage treatment plants—Disinfection.
246-271-100	Irrigation with sewage.
246-271-110	Use of sewage sludge for fertilizer.
246-271-120	Adoption of appendix details as rules.
246-271-130	Appendix—Definitions.
246-271-140	Appendix—Report—Sewerage system.
246-271-150	Appendix—General layout map.
246-271-160	Appendix—Plot plan.

246-271-170 Appendix—Engineering report—Sewage treatment works.
 246-271-180 Appendix—Preliminary report, industrial waste treatment works.

246-271-990 Fees.

WAC 246-271-010 Definitions. For the purpose of these rules and regulations, the terms shall have the meaning as defined in the appendix.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-271-010, filed 12/27/90, effective 1/31/91; Regulation .92.001, effective 3/11/60.]

WAC 246-271-020 Prohibited methods of sewage disposal. No sewage or industrial waste, or components thereof, shall be placed or permitted to be placed, or permitted to flow onto the surface of the ground, or into any waters of the state in any manner determined by the state director of health to be prejudicially affecting a domestic water supply, or otherwise endangering the health and well-being of the people of the state.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–271–020, filed 12/27/90, effective 1/31/91; Regulation .92.010, effective 3/11/60.]

WAC 246-271-030 Investigative and order powers of director. The state director of health shall investigate the methods of sewage and industrial waste disposal and if such may endanger a domestic water supply, or in any other way endanger the health or well-being of the people of the state, he shall issue and enforce such orders as may be necessary to correct the condition.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-271-030, filed 12/27/90, effective 1/31/91; Regulation .92.020, effective 3/11/60.]

WAC 246-271-040 Plans for sewerage systems. (1) Report, general layout map and specifications – Every owner or his authorized representative shall make a comprehensive study of his sewerage system and prepare and submit to the state director of health a copy of a report, a general layout map and general construction specifications of his public sewerage system. Written approval of this report, general layout map and general construction specifications shall be obtained from the state director of health before any further construction, alterations or additions are made to the system or, in case of a new system, before such system is constructed except as provided in (a) below. After such approval has been received the owner will not be required to submit any further plans and specifications for any part of the sewerage system covered by the general layout map except as required by (b), (c) and (d) below, but the owner shall notify the state director of health of any portion of the system to be constructed and indicate its position on the approved general layout map. (The specifications may be submitted at the time of notification of construction.) The report and general layout map shall include but not be limited to the items listed under those headings in the appendix.

(a) In lieu of an approved report, general layout map, and specifications, any owner or his authorized representative shall submit a copy of a report, a plot plan, and

specifications of each new sewerage system or alterations or additions to any existing sewerage system and receive written approval before construction is started. The report and plot plan shall include but not be limited to those items listed in the appendix.

- (b) Whether or not a report and general layout map have been approved, if the system does not include adequate sewage treatment works as determined by the state director of health, written approval for the construction of each addition or alteration of the sewerage system must be obtained from the state director of health before construction is started.
- (c) In case an addition is to be made to a sewerage system and this addition is not a part of an approved general layout map, the owner shall submit a copy of a revised general layout map or a plot plan of the area to the state director of health and receive written approval before construction is started.
- (d) Every owner shall submit a set of detailed plans and specifications of all overflow or bypass structures, pipe outlets and pumping stations with overflow structures, showing the quantities of flow for which they are designed and shall receive written approval from the state director of health before construction is started.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-271-040, filed 12/27/90, effective 1/31/91; Regulation .92.030, effective 3/11/60.]

WAC 246-271-050 Plans for sewage treatment works. Engineering report of sewage treatment works – Before detailed plans and specifications for new sewage treatment works or major extensions, alterations or improvements to existing sewage treatment works are prepared, every owner or his authorized agent shall submit one copy of a preliminary engineering report to the secretary of the department of social and health services or his designee and receive written approval of the secretary of the department of social and health services or his designee. This report shall include the items listed under "scope of the engineering report" in the appendix.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-271-050, filed 12/27/90, effective 1/31/91; Order 72, § 248-92-040, filed 4/11/72; Regulation .92.040, effective 3/11/60.]

WAC 246-271-060 Plans for sewage treatment works—Requirements for engineers. All plans for new sewage treatment plants, major changes or additions to existing systems or plants shall be prepared under the supervision of a professional engineer licensed in accordance with chapter 283, Laws of 1947 (chapter 18.43 RCW). All copies of plans submitted to the state director of health for review shall bear the seal of the professional engineer under whose supervision they have been prepared.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-271-060, filed 12/27/90, effective 1/31/91; Regulation .92.050, effective 3/11/60.]

WAC 246-271-070 Operation of sewage treatment plants--Efficiency. (1) Efficient operation - All sewage

treatment plants shall be operated at their highest practical efficiency at all times. If, after investigation by the state director of health, it is determined that any sewage treatment works is, because of defective design, inadequacy, incompetent supervision or inefficient operation, causing unsatisfactory conditions in the waters into which the effluent is discharged or otherwise interfering with the legitimate uses of such waters or causes a menace to public health, the owner shall make such changes in the plant or its operation as are necessary to produce satisfactory results. These changes shall be made within such time limits as are set by the state director of health.

(2) Records – The owner shall make such tests and keep such records as are necessary to assure the effective operation of the sewage treatment works, and such records shall be made available to the state director of health.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-271-070, filed 12/27/90, effective 1/31/91; Regulation .92.060, effective 3/11/60.]

WAC 246-271-080 Operation of sewage treatment plants—Freedom from sand and silt. All sewerage systems shall be kept free from obstructions and deposits of sand and silt. All pumping stations in the sewerage system shall be effectively maintained to insure continuous operation.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-271-080, filed 12/27/90, effective 1/31/91; Regulation .92.070, effective 3/11/60.]

WAC 246-271-090 Operation of sewage treatment plants—Disinfection. Effective disinfection of sewage discharges shall be provided in accordance with the determination of the state director of health. If at any time effective disinfection cannot be accomplished due to the breakdown of equipment or the need for bypassing raw or partially treated sewage, or any other reason, the owner shall immediately notify the state director of health by telephone or telegraph.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-271-090, filed 12/27/90, effective 1/31/91; Regulation .92.080, effective 3/11/60.]

WAC 246-271-100 Irrigation with sewage. Raw sewage, or treatment plant effluent, shall not be used for irrigation, except under conditions as may be prescribed by the state director of health.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-271-100, filed 12/27/90, effective 1/31/91; Regulation .92.090, effective 3/11/60.]

WAC 246-271-110 Use of sewage sludge for fertilizer. The use of sewage sludge for fertilizing material shall be in compliance with the limitations and procedures as may be prescribed by the state director of health; and the owner shall notify the state director of health of any intended use of sludge as a fertilizing material.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–271–110, filed 12/27/90, effective 1/31/91; Regulation .92.100, effective 3/11/60.]

WAC 246-271-120 Adoption of appendix details as rules. This appendix contains details referred to in the rules and regulations and is adopted as a part of these rules and regulations.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-271-120, filed 12/27/90, effective 1/31/91; Appendix to Public Sewage Rules, effective 3/11/60.]

- WAC 246-271-130 Appendix—Definitions. (1) "Commission" The Washington pollution control commission.
- (2) "Sewage" The water-carried waste products or discharge from human beings or other wastes from residences, public or private buildings, together with such ground, surface or storm water as may be present.
- (3) "Industrial wastes" The liquids, solids, or other wastes resulting from any process of industry, or from the development of any natural resource.
- (4) "Sewage works" A comprehensive term which includes facilities for collecting, pumping, treating, and disposing of sewage; the sewerage system and the sewage treatment works.
- (5) "Sewage treatment works" An arrangement of devices and structures for treating sewage, industrial wastes, and sludge. Sometimes used as synonymous with sewage treatment plant.
- (6) "Sewerage system" A system of sewers and appurtenances for the collection, transportation, and pumping of sewage and industrial wastes.
- (7) "Industrial waste treatment works" An arrangement of devices and structures for treating industrial wastes.
- (8) "Sewer" A pipe or conduit; generally closed, but normally not flowing full, for carrying sewage and other waste liquids.
- (9) "Pumping station" A station housing sewage pumps, and their appurtenances.
- (10) "Pipe outlet" A pipe line which conveys the effluent from a reservoir, sewage treatment plant, or other structure to its point of discharge.
- (11) "Sewer outlet" The point of final discharge of sewage or treatment plant effluent.
- (12) "Owner" The state, county, city, town, village, corporation, firm, company, institution, person or persons owning or operating any sewerage system, sewage treatment plant, or industrial waste disposal system or treatment plant.
- (13) "Detailed plans" of sewerage systems Plans used for the construction of any sewer or sewer system.
- (14) "Final plans" of sewage treatment works Plans used for the construction of any sewage treatment works.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–271–130, filed 12/27/90, effective 1/31/91; Public Sewage Appendix, effective 3/11/60.]

WAC 246-271-140 Appendix--Report--Sewerage system. The "report" shall include: -

(1) A description of the nature and extent of the area included in the present system (if any) and the area and extent to which plans provide sewage works for future development.

- (2) The population trend and an estimate of future population to be served.
- (3) A statement regarding the present and expected future quantity and character of sewage, including any industrial wastes which may be present or expected in the sewerage system.
- (4) A discussion of limitations placed on infiltration and the infiltration problem.
 - (5) A statement regarding provisions for treatment.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-271-140, filed 12/27/90, effective 1/31/91; Public Sewage Appendix, effective 3/11/60.]

WAC 246-271-150 Appendix—General layout map. The general layout map shall include the following items:

- (1) **Boundaries** The boundary lines of the municipality or sewer district to be sewered.
- (2) Existing sewers The location, size and direction of flow of all existing sanitary or combined trunk sewers and the boundaries of the areas served by each.
- (3) **Proposed sewers** The location, size and direction of flow of all proposed trunk sewers and the boundaries of the areas to be served by each.
- (4) Existing and proposed pump stations Location of all existing and proposed pumping stations designated to distinguish between those existing and proposed.
- (5) **Topography and elevations** Topography showing pertinent ground elevations and including existing and proposed streets, if such information is available.
- (6) Streams, lakes and other bodies of water The location and direction of flow of major streams and the high and low elevations of all water surfaces at sewer outlets and overflows.
- (7) Public water supplies The location of wells or other sources of public water supply, water storage reservoirs, and other structures of public health significance.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–271–150, filed 12/27/90, effective 1/31/91; Public Sewage Appendix, effective 3/11/60.]

WAC 246-271-160 Appendix-Plot plan. The plot plan shall include: -

- (1) **Boundaries** The boundary lines of the area involved.
- (2) Sewer lines All sewer lines and their tie-in with the existing system.
- (3) Other data Elevations, slopes, pipe sizes, and manhole spacings.
- (4) Public water supplies The location of wells or other sources of public water supply, water storage reservoirs, and other structures of public health significance.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-271-160, filed 12/27/90, effective 1/31/91; Public Sewage Appendix, effective 3/11/60.]

WAC 246-271-170 Appendix-Engineering report—Sewage treatment works. The engineering report for the sewage treatment works shall include the following items together with any other relevant data —

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- (1) The purpose and need for the proposed project.
- (2) The nature and extent of the area included in the present system and the area and extent to which plans provide sewage works for future development. If the area to be served by existing and proposed sewers does not include the entire municipality, sewer district, or natural drainage area, give a brief description of that portion not included, together with information as to the probability of future development, and the method by which this area can be served by treatment works.
- (3) The population trend as indicated by available records, and give the estimated future population for the design period. Describe briefly the method used to determine future population trends.
- (4) Any existing sewage treatment works as they are related to the proposed project.
- (5) Discuss the location of water supply and distribution structures as they relate to the various portions of the proposed sewage works.
- (6) The considerations given to possibility of garbage disposal in sewage works.
- (7) List of all establishments producing appreciable quantities of industrial wastes and the quantity, production periods, and character of industrial wastes in so far as they may affect the sewerage system or sewage treatment works. Consideration shall be given to future industrial expansion.
- (8) The degree of treatment proposed based upon the size, usage and character of the receiving body of water and upon the amount and strength of sewage or waste to be treated and other influencing factors.
- (9) The type or types of treatment process proposed based upon the character of sewage or waste to be handled and the degree of treatment required.
- (10) Data on the volume and strength of sewage and the design data regarding flow and strength.
- (11) The ratio of interception in connection with existing combined sewers, and the quantity expected to be bypassed during storms.
- (12) The basic design data of each unit of the treatment works.
 - (13) Provision for future needs.
- (14) Discussion of the various sites available and the advantages of the one recommended. The proximity of residences or developed areas to any treatment works. The relationship of maximum high water to the plant site and various plant units.
- (15) Expected efficiencies of each unit and the entire plant, and the character of effluent expected.
- (16) A flow diagram showing general layout of various units.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-271-170, filed 12/27/90, effective 1/31/91; Public Sewage Appendix, effective 3/11/60.]

WAC 246-271-180 Appendix--Preliminary report, industrial waste treatment works. The preliminary report on industrial waste disposal or treatment facilities shall include the following items where pertinent -

- (1) Type of industry.
- (2) Kind and quantity of finished products.

- (3) The amount of process waste and its sources.
- (4) The quantity of unpolluted water, such as cooling water, etc., and the provision for segregation for separate discharge.
- (5) Description of the waste, including if possible a chemical analysis.
- (6) The amount and kind of chemicals used in the process, if any.
 - (7) The basic design data of the treatment units.
- (8) All necessary maps and layout sketches, including any flow diagrams.
 - (9) Results to be expected from the treatment process.
- (10) All data necessary to indicate the location of the outlet pipe and method of diffusing the waste into the receiving water.
- (11) If any domestic sewage is to be disposed of through the system, a brief description in compliance with the provisions of WAC 248-92-020 should be included.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-271-180, filed 12/27/90, effective 1/31/91; Public Sewage Appendix, effective 3/11/60.]

WAC 246-271-990 Fees. (1) The minimum fee for required review of land application of municipal wastewater shall be two hundred dollars. If review time exceeds four hours, fifty dollars for each additional hour or part of an hour shall be added to the minimum fee.

(2) The minimum fee for required review of comprehensive sewer plans shall be two hundred dollars. If review time exceeds four hours, fifty dollars for each additional hour or part of an hour shall be added to the minimum fee.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-271-990, filed 12/27/90, effective 1/31/91.]

Chapter 248-272 WAC ON-SITE SEWAGE SYSTEM

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246-272-220	Disposal of septic tank waste.

246-272-230 Installer requirements. 246-272-240 State advisory committee.

246-272-990 Fees.

WAC 246-272-001 Authority. Pursuant to the authority of RCW 43.20.050 (powers and duties of state board of health), these regulations are hereby established as minimum requirements of the state board of health governing on-site sewage systems.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–001, filed 12/27/90, effective 1/31/91; 83–13–014 (Order 259), § 248–96–010, filed 6/3/83; Order 101, § 248–96–010, filed 6/10/74.]

WAC 246-272-002 Purpose and objectives. (1) The purpose of these regulations is to assure protection of public health by minimizing:

- (a) Public health effects of on-site sewage systems on surface and ground waters, and
 - (b) Potential for public exposure to sewage.
- (2) These regulations provide for a uniform framework through which local boards of health may establish a system of local regulations. Such local regulations shall reflect local conditions and be consistent with the intent of these regulations. These regulations are intended to accomplish the following objectives:
- (a) Establish design, installation, and management requirements for on-site sewage systems to accommodate long-term treatment and disposal of sewage.
- (b) Establish minimum functional regulations for local boards of health choosing not to adopt local regulations.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–002, filed 12/27/90, effective 1/31/91; 83–13–014 (Order 259), § 248–96–011, filed 6/3/83; Order 101, § 248–96–011, filed 6/10/74.]

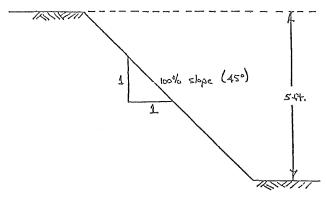
WAC 246-272-005 Administration. The health officer and local board of health shall administer these regulations under the authority and requirements of chapters 70.05, 70.46 and 43.20 RCW. As provided in RCW 70.05.060(7), fees may be charged for this administration.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–005, filed 12/27/90, effective 1/31/91; 83–13–014 (Order 259), § 248–96–018, filed 6/3/83; Order 101, § 248–96–018, filed 6/10/74.]

WAC 246-272-010 Definitions. (1) "Alternative system" means any on-site sewage system consisting of treatment and/or disposal components other than a septic tank and a subsurface soil absorption system (SSAS).

- (2) "Approved" means acceptable by the health officer or department as stated in writing.
- (3) "Cover" means soil material that is used to cover a subsurface disposal area.

(4) "Cuts and/or banks" means any naturally occurring or man-formed slope which is greater than one hundred percent (forty-five degrees) and extends vertically at least five feet from the toe of the slope to the top of the slope as follows:



- (5) "Department" means the Washington state department of health or health officer if the approval authority for larger on-site sewage systems under WAC 248-96-075 has been delegated by agreement.
- (6) "Experimental system" means any alternative onsite system excluding a larger system with no guidelines established by the technical review committee as per WAC 248-96-046.
- (7) "Gross land area" means a lot area which is bounded by the centerline of adjoining road or street right-of-ways within the boundaries of the proposed development.
- (8) "Ground water" means a subsurface water occupying the zone of saturation, permanently, seasonally, or as the result of the tides, (the top surface of which is commonly referred to as the water table) which may be demonstrated by one or all of the following methods:
- (a) Water seeping into or standing in an open excavation from the soil surrounding the excavation.
- (b) Spots or blotches of different color or shades of color interspersed with a dominant color in soil, commonly referred to as mottling. This is caused by intermittent periods of saturation and drying, and may be indicative of poor aeration and impeded drainage.
- (9) "Health officer" means the health officer of the city, county, or city—county health department or district or a representative authorized by and under the direct supervision of the health officer.
- (10) "Larger on-site sewage system" means any on-site sewage system with design flows, at any common point, between 3,500 and 14,500 gallons/day. On-site sewage systems receiving state or federal grants, or systems using mechanical treatment or lagoons with ultimate design flows above 3,500 gallons/day are excluded from this definition. Excluded systems are governed by chapter 173-240 WAC which is administered by the Washington state department of ecology.
- (11) "Local board of health" means the city, town, county, city-county, or district board of health as defined in chapters 70.05, 70.08, and 70.46 RCW.
- (12) "Marine expansion" means any change to a structure or in the use of a structure that may cause a

marine shoreline on-site sewage system to exceed its capacity. Changes that may constitute expansion include, but are not limited to:

- (a) An increase in the structure's volume of generated wastewater;
 - (b) Higher strength of generated sewage; or
- (c) Any other change adversely impacting the treatment or disposal of sewage in the existing on-site sewage system or in the replacement area.
- (13) "Marine failure" means a marine shoreline onsite sewage system threatening the public health by failing to adequately treat the sewage and/or by creating a potential for the public coming in direct contact with sewage. Examples include, but are not limited to:
 - (a) Sewage contaminating surface or ground water;
 - (b) Sewage on the surface of the ground;
 - (c) Sewage leaking from a wastewater container;
- (d) Sewage backing up into a structure or in the onsite sewage system caused by slow absorption of sewage in the SSAS; or
- (e) Cesspools or seepage pits in areas of groundwater or surface water quality concerns.
- (14) "Marine shoreline" means property adjacent to marine water.
- (15) "Nonconforming repair" means the permitted repair or replacement of a marine shoreline on—site sewage system not meeting the definition of a standard marine system.
- (16) "On-site sewage system" means any system of piping, treatment devices, or other facilities that convey, store, treat, or dispose of sewage on the property where it originates or on adjacent or nearby property under the control of the user where the system is not connected to a public sewer system.
- (17) "Ordinary high—water mark" means the mark on all lakes, streams, and tidal waters, which will be found by examining the beds and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation, as that condition exists on the effective date of this chapter, or as it may naturally change thereafter: *Provided*, That in any area where the ordinary high—water mark cannot be found, the ordinary high—water mark adjoining saltwater shall be the line of mean higher high tide and the ordinary high—water mark adjoining freshwater shall be the line of mean high water.
- (18) "Percolation test" means a soil test performed at the depth of the bottom of a proposed subsurface soil absorption system estimating the water absorption capability of the soil. The results are normally expressed as the rate in minutes at which one inch of water is absorbed.
- (19) "Person" means any individual, corporation, company, association, society, firm, partnership, joint stock company or any branch of state or local government.
- (20) "Proprietary device or method" means any device or method classified as an alternative system or a

- component thereof that is held under a patent, trademark or copyright.
- (21) "Public sewer system" means a sewerage system owned or operated by a city, town, municipal corporation, county, political subdivision of the state, or other approved ownership consisting of a collection system and necessary trunks, pumping facilities and a means of final treatment and disposal and approved or under permit from the department of ecology.
- (22) "Restrictive layer" means a layer impeding the movement of water, air, and growth of plant roots. Examples of such layers or conditions are groundwater tables, hardpans, claypans, fragipans, compacted soil, bedrock and clayey soil.
- (23) "Septic tank" means a watertight pretreatment receptacle receiving the discharge of sewage from a building sewer or sewers, and designed and constructed to permit separation of settleable and floating solids from the liquid, detention and digestion of the organic matter, prior to discharge of the liquid portion.
- (24) "Sewage" means the water-carried human or domestic waste from residences, buildings, industrial establishments or other facilities, together with ground water infiltration, that may be present.
- (25) "Soil log" means an excavation in soil of sufficient size and depth allowing adequate determinations of the soil's characteristics together with the detailed description of the soil's texture, structure, color, bulk density or compaction, water absorption capabilities or permeability, and/or other characteristics providing information on the soil's capacity to act as an acceptable treatment and disposal medium for sewage.
- (26) "Standard marine system" means a marine shoreline on-site sewage system meeting all the WAC 248-96-100 and 248-96-110 requirements, except the following:
 - (a) The vertical separation shall:
 - (i) Be three feet when the SSAS is gravity fed;
- (ii) Be two feet when the SSAS has pressure distribution per technical review committee guidelines; or
- (iii) Meet the technical review committee alternative system guidelines.
- (b) A minimum horizontal separation of fifty feet shall exist between the SSAS or other soil absorption component and the ordinary high—water mark.
- (27) "Subdivision" means a division of land, as defined in chapter 58.17 RCW, now or as hereafter amended, including both long and short subdivisions.
- (28) "Subsurface soil absorption system (SSAS)" means a system consisting of trenches (three feet or less in width) or beds (more than three feet in width), together with the piping and gravel, designed and installed in original undisturbed soil for the purpose of receiving effluent from a septic tank or other pretreatment device and transmitting it into the soil.
- (29) "Surface water" means any body of water, whether fresh or marine, flowing or contained in natural or artificial depressions for significant periods of the year. Such bodies include, but are not limited to, natural and artificial lakes, ponds, rivers, streams, swamps, marshes, and tidal waters.

- (30) "Treatment standard 1" means a thirty-day average of less than 10 mg/l of BOD5 and 10 mg/l of total suspended solids and a thirty-day geometric mean of less than 200 fecal coliform/100 ml.
- (31) "Treatment standard 2" means a thirty-day average of less than 10 mg/l of BOD5 and 10 mg/l of total suspended solids and a thirty-day geometric mean of less than 800 fecal coliform/100 ml.
- (32) "Type 1 soil" means soil with a texture as noted in WAC 248-96-094 (Determination of site characteristics) or other soils where conditions are such that the treatment potential is ineffective in retaining and/or removing substances of public health significance to underground sources of drinking water.
- (33) "Vertical separation" means the depth of unsaturated, original, undisturbed soil of types 2-6 that exists between the bottom of a SSAS and a restrictive layer or water table.
- (34) "Wave barrier" means a bulkhead of adequate height and construction preventing backwash of on-site sewage system components from wave action resulting from inclement weather and/or watercraft during extreme high tides.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–010, filed 12/27/90, effective 1/31/91. Statutory Authority: 1989 c 349. 89–21–026 (Order 332), § 248–96–020, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 43.20-050. 83–13–014 (Order 259), § 248–96–020, filed 6/3/83; 81–05–028 (Order 208), § 248–96–020, filed 2/18/81; 80–04–038 (Order 196), § 248–96–020, filed 3/20/80; Order 101, § 248–96–020, filed 6/10/74.]

WAC 246-272-020 Local regulation. (1) Local boards of health may adopt local rules and regulations governing on-site sewage systems. Local rules, regulations, and guidelines shall be consistent with, and at least as stringent as, the state board of health regulations. Local rules and regulations and any subsequent revisions shall be approved by the department in accordance with the procedure outlined in subsections (2) through (7) of this section.

Beginning July 1, 1984, the health officer shall begin to enforce these regulations, unless local rules and regulations have been approved by the department and adopted locally. This shall not preclude the adoption of rules and regulations by local boards of health after June, 1984.

- (2) Local boards of health shall submit to the department for review and approval a copy of proposed local regulations.
- (3) Upon reviewing the local regulations, the department shall consider all factors relevant to the administration of the local health department's program.
- (4) The department shall have ninety days from the date of receipt of the local regulations to either approve or disapprove the proposal. Failure of the department to approve or disapprove within the ninety—day period results in the approval of the local regulation.
- (5) Locally proposed or adopted regulations or revisions will become effective after the regulations or revisions have received approval from the department or ninety days after receipt by the department, whichever

- comes first. The local health department shall provide to the department a copy of the adopted local regulations.
- (6) If the department determines that the local regulations are not consistent with the purpose and objectives of the state board of health regulations, the department shall provide in writing to the local board of health, the specific reasons for not approving the local regulations. Decisions may be appealed to the state board of health within one hundred twenty days after the disapproval has been received by the local board of health. Resubmission of revised local regulations may occur any time after disapproval has been received.
- (7) Local rules and regulations shall include special requirements for areas within their jurisdiction identified as having type 1 soils. The requirements within these regulations shall be commensurate with the degree of protection deemed necessary for the underground source of drinking water by the health officer and the department. The minimum requirement shall be as noted in WAC 248-96-090 (Minimum land area requirement).
- (8) Nothing in these regulations shall prohibit the adoption and enforcement of more stringent regulations by local health departments where such regulations are needed to protect the public health.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-272-020, filed 12/27/90, effective 1/31/91; 83-13-014 (Order 259), § 248-96-025, filed 6/3/83.]

- WAC 246-272-030 Applicability. These regulations shall apply to all on-site sewage systems except the following:
- (1) New construction for which a permit was issued prior to July 1, 1984, or adoption of local regulations and is still valid. The regulations in effect at the time the permit was issued shall apply, except where portions of the new regulations are less stringent;
- (2) An extension, alteration, or replacement necessitated by the failure of an existing on-site sewage system and is not on a marine shoreline. These regulations shall be applied to the maximum extent permitted by the site. A permit shall be required as per WAC 248-96-080 (Permit);
- (3) Permit applications for systems located in subdivisions having received preliminary approval or having been filed for record between July 1, 1979, and June 30, 1984 (chapter 58.17 RCW). The regulations in effect at the time preliminary or final approval was given shall apply, unless the local board of health finds a change in conditions creates a serious threat to the public health; and
- (4) Facilities constructed or operated in accordance with a permit or approval issued by the Washington state department of ecology. Where these regulations may be in conflict with chapters 90.48 or 70.95B RCW, said RCW shall govern.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–030, filed 12/27/90, effective 1/31/91. Statutory Authority: 1989 c 349. 89–21–026 (Order 332), § 248–96–040, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 43.20.050. 83–13–014 (Order 259), § 248–96–040, filed 6/3/83; 80–04–038 (Order 196), § 248–96–040, filed 3/20/80; Order 101, § 248–96–040, filed 6/10/74.]

- WAC 246-272-040 Alternative systems. (1) The health officer may issue permits for alternative systems only after the requirements of subsections (2) and (3) of this section are completed.
- (2) The department shall establish and maintain a technical review committee. The committee shall be composed of a maximum of seven members and consist of qualified representatives. Representatives may be selected from local health departments; consumer organizations; engineering firms; the department of ecology; a public sewer utility; land sales, subdivision and building industries; and other interested organizations. The functions of the committee are to review and evaluate alternative systems and establish guidelines for use. Such guidelines may include national standards including, but not limited to, guidelines of the national sanitation foundation.
- (3) Once guidelines for an alternative system have been established by the technical review committee, that system can be permitted for use. However, before a proprietary device or method can be permitted, certification in a manner prescribed by the department must be provided to the department that all criteria in the appropriate guidelines have been satisfied.
- (4) The health officer shall require monitoring of the performance of any alternative system installed for which guidelines have been developed. The frequency and duration of monitoring shall be in accordance with guidelines developed by the technical review committee. Costs for monitoring and/or reporting may be included as an addition to the permit fee. Procedures for monitoring and reporting shall be developed by the technical review committee. Copies of any records of such performance evaluation shall be submitted to the department.
- (5) The technical review committee shall recommend to the department for approval:
- (a) Which alternative systems or combinations of alternative systems meet treatment standard 1 and/or treatment standard 2; and
- (b) The operation, maintenance, monitoring, and reporting protocol for each system meeting treatment standard 1 and/or treatment standard 2.
- (6) The department shall maintain a list of alternative systems meeting treatment standard 1 and/or treatment standard 2.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–040, filed 12/27/90, effective 1/31/91. Statutory Authority: 1989 c 349. 89–21–026 (Order 332), § 248–96–046, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 43.20-050. 83–13–014 (Order 259), § 248–96–046, filed 6/3/83; Order 101, § 248–96–046, filed 6/10/74.]

WAC 246-272-050 Experimental systems. (1) If supportive theory and/or applied research exists, a limited number of specific experimental systems may be permitted. Prior to the installation of such a system, an experimental system permit shall be obtained from the local health officer. Costs for monitoring and reporting may be included as part of the experimental system permit fee.

- (2) The use of an experimental system may be considered when:
- (a) The experimental system proposed is attempting to correct a failing system and other conventional or alternative systems are not feasible.
- (b) The experimental system proposed is for new construction where it has been determined that an on-site sewage system meeting the requirements of these rules and regulations could be installed in the event of failure of the experiment. A recorded agreement shall exist stating that, in the event of unsatisfactory performance or a failure to adequately monitor the system and submit the records to the health officer, the health officer may direct that use of the experimental system be discontinued and a new system meeting the requirements of these regulations be installed.
- (3) General guidelines for the use of experimental systems shall be developed by the technical review committee.
- (4) The health officer shall require monitoring of the performance of experimental systems in a manner and with a frequency as established by the technical review committee guideline.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–050, filed 12/27/90, effective 1/31/91; 83–13–014 (Order 259), § 248–96–047, filed 6/3/83.]

WAC 246-272-060 No surface discharge. Sewage from any on-site sewage system, excluding septic tank waste as per WAC 248-96-170 (Disposal of septic tank waste), shall not be discharged to surface water or upon the surface of the ground.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–060, filed 12/27/90, effective 1/31/91; 83–13–014 (Order 259), § 248–96–050, filed 6/3/83; Order 101, § 248–96–050, filed 6/10/74.]

- WAC 246-272-070 Connection to public sewer system. (1) Connection of any existing dwelling unit or other premises with a failing on-site sewage system shall be made to a public sewer system where there is an adequate public sewer within two hundred feet of the dwelling or other facility to be served as measured along the usual or most feasible route of access, and connection is permitted by the sewer utility. This requirement may be waived if the health officer determines that adequate site conditions exist which allow the installation of a replacement on-site sewage system.
- (2) Any existing dwelling or other premises served by a nonconforming repair shall be connected to the public sewer system when:
- (a) An adequate public sewer becomes available within a distance of two hundred feet of the dwelling or other facility. The distance shall be measured along the usual or most feasible route of access; and
- (b) The sewer connection is permitted by the sewer utility.
- (3) Local regulations may provide requirements for connections of new construction to public sewer systems.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-272-070, filed 12/27/90, effective 1/31/91. Statutory Authority: 1989 c 349. 89-21-026 (Order 332), § 248-96-060,

filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 43.20-.050. 83-13-014 (Order 259), § 248-96-060, filed 6/3/83; Order 101, § 248-96-060, filed 6/10/74.]

WAC 246-272-080 Larger on-site sewage systems. Plans and specifications for new construction or repairs or expansions to existing larger on-site sewage systems, bearing the signature of the owner or an authorized representative, shall be submitted to and approved by the department prior to construction. By a mutual agreement with the department, local health departments may assume plan review and approval authority for larger on-site sewage systems. Where the assistance of the health officer in the review of the site and/or the design is requested by the department, fees for service may be charged to the applicant by the health officer: Provided, That the authorization for such fees is set forth in local regulations adopted pursuant to this chapter. Submittals, design, and management requirements shall adhere to the following procedures, requirements, and review documents.

- (1) Preliminary report: Prior to or concurrent with the preparation of detailed plans and specifications for new construction or improvements to a larger on-site sewage system, the person proposing the larger on-site sewage system shall submit to the department for approval a preliminary report addressing the nature and scope of the proposed construction. This report shall include an analysis of the area where the proposed SSAS is to be located to satisfactorily assimilate and treat the proposed sewage quantities for the anticipated life of the system. In addition to those factors identified in WAC 248-96-090 (1)(b), the preliminary report shall contain, but need not be limited to, consideration of the following factors:
 - (a) Soil and site evaluation.
 - (b) Schedule for phase development.
 - (c) Water balance analysis of the drainfield area.
- (d) Overall effects of the proposed sewage system upon the surrounding area.
- (e) Local zoning, platting, and building requirements as they relate to sewer utilities.
 - (2) Submission of plans and specifications:
- (a) Complete plans and specifications fully describing the larger on-site sewage system shall be submitted to and approved in writing by the department prior to:
 - (i) Installation of the system, or
- (ii) Entering into contract for installing a larger onsite sewage system.

The plans and specifications shall be adhered to unless deviations are first submitted to and written approval received from the department. Routine field deviations required during construction need not be submitted for approval but shall be shown on the "as-built" drawings.

- (b) Plans submitted for approval shall include the proposed provisions for inspection of the work during construction.
- (c) A detailed operation and maintenance manual, fully describing the treatment and disposal systems and outlining routine maintenance procedures for proper operation of the system, shall be submitted together with the plans and specifications.

- (3) Approvals—Period of validity—Renewal:
- (a) Approvals of plans and specifications by the department under this section shall be valid for an initial period of two years commencing with the date of the letter of approval.

Lapsed approvals may be renewed for successive oneyear periods thereafter at the discretion of the department upon the written request by the applicant.

- (b) As a condition of renewal, the department may require the plans and specifications to be revised to conform with the design standards and the requirements of the rules and regulations of this chapter current at the time of request for renewal.
- (4) Requirements for engineers and engineer's construction report: All preliminary engineering reports and plans and specifications for new larger on-site sewage systems, extensions or alterations, shall be prepared by a professional engineer licensed in the state of Washington in accordance with chapter 18.43 RCW and shall bear the engineer's seal. Within sixty days following the completion of and prior to the use of any project or portion thereof for which plans and specifications have received the approval of the department, an engineer's construction report shall be submitted to the department and signed by a professional engineer stating the project has been constructed in accordance with the plans and specifications approved by the department. If any changes exist from the approved plans and specifications, "asbuilt" drawings noting such changes shall be submitted to the department. Where larger on-site systems are reviewed and approved by the health officer, the health officer may also accept preliminary reports, plans and specifications, and construction reports submitted by a registered sanitarian or a designer certified within the health officer's jurisdiction. The professional engineer, registered sanitarian, or certified designer should have expertise in the areas of soils and the design of larger on-site sewage systems.
- (5) The review and approval agency shall establish a procedure for construction and final inspections.
- (6) Design of the system shall comply with Design Guidelines for Larger On-site Sewage Systems, December 1979, D.S.H.S./D.O.E.
- (7) Soil interpretations shall be based upon the Design Manual: On-site Wastewater Treatment and Disposal Systems, United States Environmental Protection Agency, EPA-625/1-80-012, October, 1980.
- (8) Management of larger on-site systems shall be provided by an entity approved by the department. The type of entity required and the degree of management shall be commensurate with the complexity of the system and the site conditions. The management entity shall submit a plan for approval including, but not be limited to, the following:
- (a) Duties of management, including operation and maintenance responsibilities.
- (b) Methods to ensure the continuity and permanency of management's responsibilities.
- (c) Monitoring, recordkeeping, and reporting to the department.
 - (d) Rights of purchasers and management.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–080, filed 12/27/90, effective 1/31/91; 83–13–014 (Order 259), § 248–96–075, filed 6/3/83; 80–04–038 (Order 196), § 248–96–075, filed 3/20/80; Order 101, § 248–96–075, filed 6/10/74.]

WAC 246-272-090 Permit. (1) No person shall install or cause to be installed a new on-site sewage system, nor perform any alterations, extensions or relocations or connections to an existing system without a valid permit issued by the health officer. Larger on-site sewage systems approved by the department are exempt from permit requirements. Permits for alterations or repairs shall be so identified. Application for such permit shall be made in writing in a manner prescribed by the health officer. Each permit application shall include a reminder of the applicant's right of appeal. The authority to issue permits shall not be delegated by the health officer.

- (2) When applying for a permit to install an on-site sewage system, a construction plan of the proposed system is required. The construction plan shall contain information as required by the health officer in sufficient detail and to a scale which will permit a proper evaluation of the application. Such information shall contain the following as a minimum:
 - (a) Name of applicant and legal description of site.
 - (b) Soil evaluation as required by the health officer.
- (c) Percolation test data where required or if obtained.
 - (d) Maximum seasonal ground water table.
- (e) General topography of the site and site drainage characteristics.

- (f) Distances of proposed system to water supply distribution lines and sources, surface water, banks or cuts, boundaries of property and structures or other improvements.
 - (g) Distance to public sewer system.
 - (h) Source of potable water supply.
- (i) Known encumbrances affecting system placement and/or operation.
- (3) For any on-site sewage system proposed to serve a structure requiring a flood control zone permit under the provisions of chapter 86.16 RCW and chapter 508-60 WAC, the installation permit shall not be issued until a flood control zone permit has been issued.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–090, filed 12/27/90, effective 1/31/91; 83–13–014 (Order 259), § 248–96–080, filed 6/3/83; 80–04–038 (Order 196), § 248–96–080, filed 3/20/80; Order 101, § 248–96–080, filed 6/10/74.]

WAC 246-272-100 Minimum land area requirement. (1) For any development approved after June 30, 1984, including but not limited to subdivisions, mobile home parks, multifamily housing, and commercial establishments, where an on-site sewage system is proposed, one of the following methods for determining minimum gross land area requirements shall be used. The minimum gross land area shall exist for each unit volume of sewage (450 gallons per day) or for each single family residence.

(a) METHOD I. Table I notes the minimum gross land area required per unit volume or single family residence based upon soil type and the type of water supply.

TABLE I
MINIMUM GROSS LAND AREA REQUIRED PER UNIT VOLUME OF SEWAGE OR SINGLE FAMILY RESIDENCE

			SOIL TYPE			
TYPE OF WATER SUPPLY	1	2	3	4	5	6
Public	l	12,500	15,000	18,000	20,000	22,000
	acre	sq.ft.	sq.ft.	sq.ft.	sq.ft.	sq.ft.
Individual—	2	l	1	l	2	2
Each Lot	acres	acre	acre	acre	acres	acres

Soil types are defined in WAC 248-96-094 (Determination of site characteristics).

(b) METHOD II.

(i) On-site sewage systems shall be installed on lots, parcels, or tracts that have a sufficient amount of area with proper soils in which sewage can be retained and treated properly on-site. Justification demonstrating the development has sufficient area with proper soils to adequately retain and treat sewage on-site shall be provided in a report. The report shall fully support the conclusions reached by the proper analysis of all needed data. All such data shall be contained or referenced. This justification shall be sufficient to enable the health officer to establish minimum gross land area requirements. The

minimum gross land area requirement for each unit volume of sewage or for each single family residence shall be twelve thousand five hundred square feet. Application of this will result in a maximum single family residence density of 3.5 units per acre or for other development a maximum flow density of one thousand five hundred seventy gallons of sewage per acre per day. Factors that must be considered in the report shall include but not be limited to the following:

- (A) Soil type and depth.
- (B) Area drainage, development and/or lot drainage.

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- (C) Public health impact on ground and surface water quality.
 - (D) Setbacks from property lines, water supplies, etc.
 - (E) Source of domestic water.
 - (F) Topography, geology, and ground cover.
 - (G) Climatic conditions.
 - (H) Availability of public sewers.
 - (I) Activity or land use, present, and anticipated.
 - (J) Growth patterns.
 - (K) Reserve areas for additional subsurface disposal.
 - (L) Anticipated sewage volume.
 - (M) Compliance with zoning and other requirements.
 - (N) Possible use of alternative systems or designs.
 - (O) Other justification submitted by the developer.
- (ii) If the report required in section (1)(b)(i) of this subsection identifies type 1 soils, the health officer may allow a reduction below the requirements noted in Table 1. The health officers and the department shall develop guidelines to be applied when such reductions are considered by July 1, 1984. Until guidelines have been developed, the health officer may permit such reductions only when an alternative system will be used. The alternative system shall provide a degree of treatment to the sewage, before the sewage enters the original, undisturbed soil, equal to or greater than the treatment provided by a mound or sand filter. Mounds and sand filters are defined and the design criteria specified in the appropriate technical review committee guidelines. Until the guidelines have been developed, the resulting gross land area per unit volume of sewage or single family residence shall not be less than one-half acre.
- (2) The health officer may reduce land area requirements in this section if the proposed on-site sewage systems are to be located within the boundaries of a recognized sewer utility and where the assessment roll has been finalized.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-272-100, filed 12/27/90, effective 1/31/91; 83-13-014 (Order 259), § 248-96-090, filed 6/3/83; Order 101, § 248-96-090, filed 6/10/74.]

WAC 246-272-110 Determination of site characteristics. (1) Site characteristics shall be determined in accordance with chapter 3 and Appendix A of Design Manual: On-site Wastewater Treatment and Disposal Systems, United States Environmental Protection Agency, Report No. EPA-625/1-80-012, October, 1980, except where modified or in conflict with these regulations.

(2) The textural classification of a soil shall be determined by using normal laboratory and/or field procedures such as particle size analyses and percolation tests. Following are the specific soil textural classifications and soil type designations. The soil textures in Table 7–2 of the design manual referenced in subsection (1) of this section are amended as follows:

Soil Type	Soil Textural Classifications ¹
1 ²	Coarse sands or coarser
2	Medium sand

Soil Type	Soil Textural Classifications ¹
3	Fine sand, loamy sand
4	Sandy loam, loam
5	Porous, well-developed struc-
	ture in silt and silt loams
6	Other silt loams, silty clay
	loams, and clay loams.

According to the United States Department of Agriculture, soil conservation service's soil classification system.

² Includes other soils and/or conditions where the treatment potential is ineffective in retaining and/or removing substances of public health significance to underground sources of drinking water.

- (3) All site evaluations shall be performed by or under the direct supervision of the health officer, a registered sanitarian, professional engineer, registered soil scientist (American registry of certified professionals in agronomy, crops and soils), or certified designer having knowledge and experience in the areas of soil and wastewater treatment and disposal.
- (4) All soil tests shall be conducted using uniform procedures and terminology as set forth in chapter 3 and Appendix A of the manual referred to in WAC 248-96-094(1).
- (5) If sufficient information is not available concerning water table conditions, the health officer or department may require that the soils analysis be performed during the months of suspected high-water table conditions.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–110, filed 12/27/90, effective 1/31/91; 83–13–014 (Order 259), § 248–96–094, filed 6/3/83.]

WAC 246-272-120 Subdivision and individual site review. (1) Subdivisions – preliminary tests for subdivisions utilizing individual on-site sewage systems shall include at least one representative soil log per acre or tract or more as required by the health officer. A reduced number of soil logs may be allowed if adequate soils information is available.

- (2) Individual sites at least one soil log shall be performed at the site of each disposal area. This requirement may be waived by the health officer if adequate soils information is available. Additional soil logs may be required where the soil characteristics vary.
- (3) Individuals performing subdivision and individual site reviews shall meet the requirements and use the procedures specified in WAC 248-96-094.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–120, filed 12/27/90, effective 1/31/91; 83–13–014 (Order 259), § 248–96–095, filed 6/3/83; Order 101, § 248–96–095, filed 6/10/74.]

WAC 246-272-130 Larger tract requirements. (1) For lots, parcels, or tracts with a gross land area of five acres or 1/128th of a section or more, the health officer may take the following actions:

- (a) Alter the requirements found in WAC 248-96-094(3), 248-96-100(2), and 248-96-110(2).
- (b) Modify the restrictions noted in WAC 248-96-094(2).

- (2) Where the health officer takes one of the actions noted in WAC 248-96-096(1), the following requirements shall apply:
- (a) All portions of a SSAS shall be at least thirty feet from property lines or lines of easement existing for SSAS installation that are at the same elevation as, or at a lower elevation than, the SSAS.
- (b) A restrictive covenant against further subdivision of the property into parcels or lots less than five acres or 1/128th of a section shall be recorded on the building site and remain in effect until connection to public sewer is made or some approved alternative is installed which the health officer determines will permit development of smaller parcels.
- (3) On-site sewage systems installed under the provisions of this section shall meet the purpose and objectives of these regulations to the maximum extent possible.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–130, filed 12/27/90, effective 1/31/91; 83–13–014 (Order 259), § 248–96–096, filed 6/3/83; Order 101, § 248–96–096, filed 6/10/74.]

WAC 246-272-140 Location. (1) The minimum distances for location of the various component parts of an on-site sewage system are measured horizontally and shall comply with Table II.

TABLE II
MINIMUM HORIZONTAL SEPARATIONS

Distance in Feet from System Component

Items Requiring Setback	From edge of SSAS and replacement area	From septic tank and dis— tribution box	From building sewer, collection, and non-perforated distribution line
Well or suction line ¹	0.00^{2}	50	50
Water supply line under pressure	10	10	10
Surface water ^{1,3}	100^{2}	50	10
Building foundation	10	5	_
Property lines or			
lines of easement	5	5	_
Interceptor/curtain			
drains/drainage ditches			
–upslope from system			
component	10	_	_
-downslope from system			
component	30	5	
Cuts or banks			
 -minimum of five feet of original, undisturbed soil above restrictive layer or layer due to a structural 			
or textural change —less than five feet of original, undisturbed soil above restrictive layer or layer due to a structural or textural change and that layer	25	-	-
is intersected	50	_	_

¹ With soil type I and on other sites where conditions indicate a greater potential for ground or surface water contamination or pollution, the distance from any water supply or surface water may be increased by the health officer.

³Setbacks from surface waters shall be measured from the ordinary high watermark.

(2) SSAS shall not be permitted in areas where a vertical separation of three feet cannot be maintained. The health officer shall require such greater vertical separation as needed to protect health when the aquifer is used for a potable water supply. The health officer may reduce the vertical separation provided the system is designed by a professional engineer, a registered sanitarian or a certified designer. However, in no case shall the separation be less than one foot.

²A reduced separation can be allowed by the health officer if it can be demonstrated that the reduction will not have an adverse effect. However, in no case shall the separation be less than seventy-five feet.

(3) On-site sewage systems shall not be located on slopes in excess of forty-five percent (twenty-four degrees). Table III notes the required depths of original, undisturbed soil above a restrictive layer for the various ranges of slope.

TABLE III
REQUIRED SOIL DEPTHS FOR SLOPES

Range of Slopes in Percent (Degrees)	Required Depth of Original Undisturbed Soil Above Restrictive Layer in Inches
0–15 (0–8)	Sufficient to satisfy minimum vertical separation
>15-22 (>8-12)	30
	42
>22-30 (>12-17) $>30-45 (>17-24)^1$	60

¹The SSAS shall be sized using a maximum loading rate of 0.5 gallons/day/square foot of trench or bed-bottom area.

- (4) An area where the soil and site conditions are acceptable for the installation of a SSAS shall be maintained for the purpose of system replacement. Except where otherwise authorized by the health officer, it shall consist of one hundred percent of the normally needed area.
- (5) The site of the initial and replacement SSAS shall be selected and maintained so that it is free from encroachment by buildings and other structures. The area shall not be covered by any impervious material and not be subject to vehicular traffic or other activity which would adversely affect the soil.
- (6) Provisions shall be made to prevent flow or accumulation of surface water over the area where the onsite sewage system is located.
- (7) On-site sewage systems shall not be located on land forms which are unstable.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–140, filed 12/27/90, effective 1/31/91; 83–13–014 (Order 259), § 248–96–100, filed 6/3/83; Order 101, § 248–96–100, filed 6/10/74.]

- WAC 246-272-150 Design. (1) The detailed design and construction of all on-site sewage systems shall conform to the "Design Manual: On-site Wastewater Treatment and Disposal Systems," United States Environmental Protection Agency, EPA-625/1-80-012, October, 1980, except where modified by, or in conflict with these regulations.
- (2) The design for an on-site sewage system shall be performed by or under the supervision of a professional engineer, registered sanitarian or certified designer. A resident owner, at the discretion of the health officer, may design the resident owner's own system, if a minimum vertical separation of three feet can be maintained.
- (3) The system shall be designed to receive all sanitary sewage and domestic waste from the building served unless otherwise approved by the health officer. For individual residences, flows of one hundred twenty gallons/bedroom/day shall be used for design purposes. For other establishments, the typical values noted in the

design manual referred to in WAC 248-96-110(1) shall be used. Any deviations shall be supported by appropriate water usage information and/or the use of low water use fixtures. Drainage from footing or roof drains or any other type of drain shall neither enter the sewage system nor be directed over the area where the on-site sewage system is located.

- (4) All septic tanks shall be designed in accordance with subsection (1) of this section, with the following exceptions:
- (a) All tanks must have a minimum of two compartments with the first compartment consisting of one-half to two-thirds of the required total volume.
- (b) Intercompartmental apparatus shall be sanitary tees, slots or baffles assuring that effluent only from the clarified zone passes into the next compartment.
- (c) Septic tanks serving single family residences shall have a minimum liquid capacity based on the number of bedrooms in the residence, as follows:

Number of Bedrooms in House	Required Minimum Liquid Volume
2 or less	750
3	900
4	1000

For each additional bedroom add 250 gallons.

A septic tank designed to service a facility other than one single family residence shall have a minimum liquid capacity equal to one and one-half times the projected daily sewage volume, with a minimum of 1000 gallons.

- (d) Concrete tanks shall be approved by the health officer. Tanks made of materials other than concrete shall be approved by the health officer and the department.
- (e) All septic tanks and pump chambers to be located in high water table areas shall be adequately treated to preclude ground water intrusion.
- (5) Effluent shall be disposed of by means of a SSAS except when approval for other disposal systems is granted by the health officer and/or the department.
- (a) The size of the SSAS shall be determined from the results of the site review and soil logs per the design manual.
- (b) The health officer shall not permit installation and use of cesspools and seepage pits for the disposal of sewage.
- (c) The bottom of a SSAS shall not be deeper than three feet below the finished grade, except under special conditions approved by the health officer. The depth of such a system shall not exceed ten feet from finished grade.
- (d) Subsurface absorption beds (see definition of SSAS) may be considered for use only when authorized by the health officer and/or the department and when the soils are type 1, 2, or 3.
- (e) Piping materials shall be approved by the health officer and the department.
- (6) Cover can be used over a SSAS provided no portion of the SSAS sidewall below the invert of the distribution pipe is installed in this material.

- (7) When sewage holding tank systems are used, a management program assuring ongoing operation and maintenance, which shall be approved by the health officer, shall be in effect. Sewage holding tanks shall not be permitted for either new construction or expansion of residential dwellings, whether seasonal or year-round. The health officer may approve sewage holding tanks for the following situations:
- (a) Permanent use. Controlled, part-time, commercial usage situations, including, but not limited to, recreational vehicle parks, trailer dump stations, and certain limited hour businesses;
 - (b) Interim use. To handle emergency situations; and
- (c) Repairs. As permitted under WAC 248-96-120 (1)(e)(i).

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–150, filed 12/27/90, effective 1/31/91. Statutory Authority: 1989 c 349. 89–21–026 (Order 332), § 248–96–110, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 43.20-.050. 83–13–014 (Order 259), § 248–96–110, filed 6/3/83; Order 101, § 248–96–110, filed 6/10/74.]

WAC 246-272-160 Repair of failures along marine shorelines. (1) When an on-site sewage system failure occurs, the health officer shall require one of the following:

- (a) Repair of the on-site sewage system using the requirements of this section. The repair system may be located either on the:
 - (i) Property served; or
- (ii) Nearby or adjacent property if easements are obtained.
- (b) Connection to a publicly owned larger on-site sewage system;
 - (c) Connection to public sewer; or
- (d) Connection to a privately owned larger system where it is deemed economically feasible.
- (e) If subsections (1)(a), (b), (c), or (d) of this section are not feasible, the health officer shall require one of the following:
 - (i) Usage of a holding tank;
- (ii) Obtainment of a National Pollutant Discharge Elimination System or state discharge permit, issued to a public entity or jointly to a public entity and the system owner, from the Washington state department of ecology. This shall be considered only if an on-site sewage system is not feasible and the only realistic method of final disposal is to discharge to the surface of the land or into surface water; or
 - (iii) Abandonment of the property.
- (2) When the soil absorption component fails, the requirements under WAC 248-96-095 (2) and (3) shall be met before a repair permit is issued.
- (3) A detailed design shall be submitted for each repair system. The repair shall be sized to accommodate all the sewage.
- (4) When repair of an on-site sewage system is required to correct a failure, the health officer shall permit:
 - (a) A standard marine system; or
- (b) A nonconforming repair. A nonconforming repair shall only be permitted when a:

- (i) Standard marine system cannot be installed; and
- (ii) Connection to either a public sewer or an approved larger on—site sewage system is not feasible.
- (5) Table IV notes the minimum repair requirements based upon vertical separation and horizontal separation. The horizontal separation indicated is the distance between the SSAS or other disposal component and the ordinary high—water mark. Treatment standards shall be met before discharge to unsaturated, subsurface soil:

TABLE IV REQUIREMENTS FOR NONCONFORMING REPAIRS

Horizontal Separation In Feet			
2 < 25	25-50	> 50	
Treatment	Treatment	Treatment	
		Standard 2 ² Pressure	
Standard 1	Standard 2	Distribution	
Treatment Standard 2 ²	Pressure Distribution		
	Treatment Standard 1 Treatment Standard 1	Treatment Standard 1 Treatment Standard 1 Treatment Treatment Standard 1 Treatment Standard 2 Treatment Pressure	

¹The health officer may permit ASTM C-33 sand to be used as fill to create unsaturated, subsurface soil, but fill cannot be used to achieve the vertical separation requirements.

- (6) When a nonconforming repair is permitted:
- (a) Priority shall be given to protection of drinking water sources. The site of the repair shall be selected to maximize the:
 - (i) Vertical separation;
 - (ii) Distance from a well or suction line; and
 - (iii) Distance to surface water.
- (b) The permit shall identify the system as a nonconforming repair. The permit shall state the manner and the extent the system is nonconforming. A copy of the permit and any accompanying easements or restrictive covenants shall be recorded with the county auditor. The requirement does not apply to a repaired system when a waiver from new construction standards is obtained per WAC 248-96-160;
- (c) Operation, maintenance, monitoring, and reporting to the health officer shall comply with the protocol in the technical review committee guidelines. The minimum frequency shall be:
- (i) Quarterly when treatment standard 1 is required; and
 - (ii) Annually when treatment standard 2 is required.
 - (d) Low-flow plumbing fixtures should be used.
- (7) The health officer shall require wave barrier protection as deemed necessary.
- (8) Actions taken under this section shall comply with other local and state requirements.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as \$246-272-160, filed 12/27/90, effective 1/31/91. Statutory Authority: 1989 c 349. 89-21-026 (Order 332), \$248-96-120, filed 10/10/89, effective 11/10/89.]

WAC 246-272-170 Marine expansions. The health officer shall require the following for a marine expansion:

(1) A standard marine system shall be installed; and

² Not including mound systems.

(2) A system replacement area shall be maintained as required by WAC 248-96-100(4).

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–170, filed 12/27/90, effective 1/31/91. Statutory Authority: 1989 c 349. 89–21–026 (Order 332), § 248–96–125, filed 10/10/89, effective 11/10/89.]

WAC 246-272-180 Designer program. Guidelines defining an approved designer program shall be established by the health officers and the department. The guidelines shall include, but not be limited to, the following:

- (1) Education;
- (2) Experience;
- (3) Testing; and
- (4) Certification.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-272-180, filed 12/27/90, effective 1/31/91; 83-13-014 (Order 259), § 248-96-130, filed 6/3/83; Order 101, § 248-96-130, filed 6/10/74.]

WAC 246-272-190 Inspection. The health officer may make inspections during construction to determine compliance with these regulations. No part of any installation shall be covered until approval has been obtained from the health officer. The health officer may waive this requirement provided the installation has been made by a person certified under WAC 248-96-175 and a designer program has been established according to WAC 248-96-130 provided that the designer performs the final inspection. If deviations from the approved plans and specifications have occurred in construction, a complete set of certified "as-built" drawings shall be provided to the health officer for a permanent record of the installation.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-272-190, filed 12/27/90, effective 1/31/91; 83-13-014 (Order 259), § 248-96-140, filed 6/3/83; Order 101, § 248-96-140, filed 6/10/74.]

WAC 246-272-200 Appeals. All local boards of health shall have an administrative appeals process to resolve procedural and technical conflicts arising from the administration of local regulations.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-272-200, filed 12/27/90, effective 1/31/91; 83-13-014 (Order 259), § 248-96-150, filed 6/3/83.]

WAC 246-272-210 Waiver of state regulations. The health officer may, upon concurrence of the department, waive these regulations or portions thereof: *Provided*, That the waiver is consistent with the intent of these regulations and that no public health hazard will result.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–210, filed 12/27/90, effective 1/31/91; 83–13–014 (Order 259), § 248–96–160, filed 6/3/83; Order 101, § 248–96–160, filed 6/10/74.]

WAC 246-272-220 Disposal of septic tank waste. (1) The contents of a septic tank or other treatment device shall be disposed of only in areas and in a manner approved by the health officer.

(2) Local boards of health shall establish requirements for persons engaged in the removal of septic tank contents, which shall include standards for equipment and operating procedures and may provide for the issuance and revocation of permits.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-272-220, filed 12/27/90, effective 1/31/91; Order 101, § 248-96-170, filed 6/10/74.]

WAC 246-272-230 Installer requirements. (1) All systems except as noted in this section shall be installed by a certified installer. Local boards of health shall establish requirements for persons, firms, and corporations engaged in installing or repairing on—site sewage systems. Guidelines stating suggested requirements shall be established by the health officers and the department. The guidelines shall include, but not be limited to:

- (a) Education;
- (b) Experience;
- (c) Testing; and
- (d) Certification.
- (2) Nothing contained herein shall prohibit resident owners from installing an individual on—site sewage system or making repairs or alterations on his or her own premises as long as all other requirements of these regulations are satisfied. The resident owner may not contract or hire a person or concern to perform that work, unless that person is a certified installer as set forth in this section.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–230, filed 12/27/90, effective 1/31/91; 83–13–014 (Order 259), § 248–96–175, filed 6/3/83; Order 101, § 248–96–175, filed 6/10/74.]

WAC 246-272-240 State advisory committee. An on-site sewage advisory committee shall be established. The members shall be selected from professions and organizations (1) having knowledge and interest in on-site sewage systems, and (2) being effected by the regulations. Meetings shall be called as necessary by the department. The purpose of the advisory board is to make recommendations concerning departmental policy and regulations, review program services, and provide input to the department regarding various facets of the on-site sewage program.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–272–240, filed 12/27/90, effective 1/31/91; 83–13–014 (Order 259), § 248–96–180, filed 6/3/83; Order 101, § 248–96–180, filed 6/10/74.]

WAC 246-272-990 Fees. (1) The minimum fee for required review of larger on-site system's engineering reports and plans and specifications shall be four hundred dollars. If review time exceeds eight hours, fifty dollars for each additional hour or part of an hour shall be added to the minimum fee. The fee for pre-site inspections for larger on-site systems shall be one hundred dollars per visit. The fee for final inspection of larger on-site systems shall be one hundred dollars per site visit.

(2) The minimum fee for required review of proprietary devices shall be two hundred dollars. If review

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time exceeds four hours, fifty dollars for each additional hour or part of an hour shall be added to the minimum fee

(3) The minimum fee for required review of experimental systems shall be four hundred dollars. If review time exceeds eight hours, fifty dollars for each additional hour or part of an hour shall be added to the minimum fee.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-272-990, filed 12/27/90, effective 1/31/91.]

Chapter 246–280 WAC RECREATIONAL SHELLFISH BEACHES

WAC 246-280-001 Authority, purpose, and scope. 246-280-010 Definitions. 246-280-015 General administration. 246-280-020 Recreational shellfish beach classification. 246-280-030 Water quality criteria and standards. 246-280-040 Marine water quality testing. 246-280-050 Shellfish meat quality standards and testing. 246-280-060 Recreational shellfish beach sanitary survey. 246-280-070 PSP monitoring of recreational beaches. 246-280-080 Public information and notification.

WAC 246-280-001 Authority, purpose, and scope. (1) Authority. Under the authority of RCW 43.20.050, powers and duties of state board of health, these regulations are hereby established as minimum requirements for the monitoring and classification of recreational shellfish beaches.

- (2) Purpose. It is the purpose of chapter 248-52 WAC to protect public health and establish procedures for evaluating the sanitary quality of recreational shell-fish beaches.
 - (3) Scope.
- (a) These regulations shall apply to recreational shell-fish beaches under public ownership. Commercial shell-fish harvest, even though it may occur on publicly owned beaches, is governed by chapter 248–58 WAC and chapter 69.30 RCW.
- (b) These regulations shall apply to recreationally harvested shellfish on privately owned beaches when the general public has unlimited access to beaches for recreational shellfishing. The department may evaluate and monitor these privately owned beaches if the department determines it to be in the public interest.
 - (4) Other statutes related to this chapter are:
- (a) Chapter 69.30 RCW, sanitary control of shellfish; and
- (b) Chapter 248-58 WAC, sanitary control of shell-fish.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–280–001, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 90.70 RCW. 89–20–020 (Order 335), § 248–52–001, filed 9/27/89, effective 10/28/89.]

WAC 246-280-010 Definitions. (1) Abbreviations:

- (a) "ml" means milliliter; and
- (b) "PSP" means paralytic shellfish poisoning.

- (2) "Beach evaluation" means the examination of the sanitary conditions of recreational shellfish beaches through water quality testing, shellfish tissue testing, PSP testing, and sanitary surveys.
- (3) "Beach inventory" means the department's list of recreational shellfish beaches governed by chapter 248–52 WAC.
- (4) "Closed classification" means a beach exceeds the standards for safe shellfish harvest.
- (5) "Conditionally open classification" means a recreational shellfish beach meets the standards for safe shellfish harvest during well—defined time periods, such as dry weather months, and is closed to shellfish harvest when the standards are exceeded.
- (6) "Department" means the Washington state department of health (DOH).
- (7) "Emergency closure" means temporary closure of a recreational shellfish beach when a contamination event is suspected of impacting an open or conditionally open beach.
- (8) "Geometric mean value" means a statistical calculation giving a mean value of data points. Geometric mean value is a term used in state water quality standards. The calculation is:
 - (a) a X b X c X d = y; and
- (b) nth root of y = geometric mean value. N = number of data points which determines the power of the root.
- (9) "Health officer" means the health officer or an authorized representative of the city, county, city—county health department or district.
- (10) "Local board of health" means the city, town, county, city-county, or district board of health as defined under chapters 70.05, 70.08, and 70.46 RCW.
- (11) "Open classification" means a recreational shell-fish beach which complies with WAC 248-52-030 standards for safe shellfish harvest without any restrictions due to health hazards.
- (12) "Paralytic shellfish poisoning (PSP)" means a human illness caused by eating shellfish that contain high levels of toxin which results from the shellfish consuming large amounts of toxin—producing microscopic marine organism called Gonyaulax catenella.
- (13) "Public ownership" means owned by the federal government, state government, a county, a city, or a port district.
- (14) "Recreational shellfish beach" means any beach under public ownership available to the public and any privately owned beach where the general public has unlimited access to recreationally harvest shellfish.
- (15) "Recreational shellfish harvest" means to harvest shellfish for personal consumption with no intention for sale or barter.
- (16) "Sanitary survey" means an evaluation of the sanitary conditions of the shoreline and uplands of a recreational shellfish beach.
- (17) "Shellfish" means, for the purposes of chapter 248–52 WAC, all varieties of oysters, clams, mussels, and scallops.

- (18) "Unclassified" means a recreational shellfish beach which does not have an initial classification because the department has incomplete sanitary survey data.
- (19) "Water quality study" means an evaluation of the sanitary conditions of the marine water of a recreational shellfish beach described under WAC 248-52-030 and 248-52-040.

[Statutory Authority: RCW 43,20.050. 91–02–051 (Order 124B), recodified as § 246–280–010, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 90.70 RCW. 89–20–020 (Order 335), § 248–52–005, filed 9/27/89, effective 10/28/89.]

- WAC 246-280-015 General administration. (1) The department and the health officer for each local health jurisdiction shall develop a joint plan of operation designating the roles of each agency for administering chapter 248-52 WAC. This plan shall:
- (a) Specifically designate those recreational shellfish beaches included in the joint plan;
- (b) Establish whether the department or the health officer shall assume primary responsibility for an identified beach;
- (c) Provide for a minimum acceptable frequency of beach evaluation;
- (d) Specify who has responsibility for water quality studies, sanitary surveys, PSP monitoring, beach classification, and public notification;
- (e) Be signed by the secretary and the chairperson of the local board of health;
- (f) Be updated as needed to ensure proper operation of the plan; and
- (g) Identify a process for implementing remedial actions to correct pollution sources where deemed appropriate by the department for those beaches classified as closed or conditionally open.
- (2) If the local board of health adopts rules governing recreational shellfish harvest within its jurisdiction, the adopted rules shall be consistent with chapter 248-52 WAC.
- (3) The department shall develop guidelines on water quality monitoring, PSP monitoring, shoreline survey procedures, public information/notification, and other tonics
- (4) Throughout this chapter, the term "health officer" may be substituted for the term "department" if the joint plan of operation delegates authority for action to the health officer.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–280–015, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 90.70 RCW. 89–20–020 (Order 335), § 248–52–010, filed 9/27/89, effective 10/28/89.]

WAC 246-280-020 Recreational shellfish beach classification. (1) The department or the health officer for each local health jurisdiction as designated in the joint plan of operation, under WAC 248-52-010, shall classify recreational shellfish beaches, based on the risk to public health from consuming shellfish. After completing an initial classification, the department or the health officer for each local health jurisdiction shall

make an annual update based on the additional data collected during the year.

- (2) The joint plan of operation's criteria used to classify beaches shall include the following:
 - (a) Water quality data;
 - (b) A sanitary survey of pollution sources; and
- (c) A review of natural and synthetic toxins, including PSP.
- (3) The department shall classify recreational shellfish beaches as follows:
 - (a) Open;
 - (b) Conditionally open;
 - (c) Closed;
 - (d) Emergency closure; and
 - (e) Unclassified.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–280–020, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 90.70 RCW. 89–20–020 (Order 335), § 248–52–020, filed 9/27/89, effective 10/28/89.]

- WAC 246-280-030 Water quality criteria and standards. (1) The department shall classify the beach as open when the following three conditions are met:
- (a) The marine water covering a recreational shellfish beach shall not exceed a geometric mean value of fourteen fecal coliform bacteria/100 ml of water. In addition, not more than ten percent of the individual water samples may exceed forty—three fecal coliform bacteria/100 ml of water. The geometric mean value shall be calculated on no less than fifteen samples for each water quality station;
- (b) Upon completion of a sanitary survey, there are no major sources of pollution of public health significance identified as affecting the beach; and
- (c) Natural and synthetic toxin levels shall not exceed established standards.
- (2) The department shall classify the beach as conditionally open when standards for open criteria are met during a well-defined and predictable time period, such as dry weather months. Use of the conditionally open classification shall be limited to beaches where sufficient data are available to establish the beach meets the open criteria for well-defined time periods.
- (3) The department shall classify a beach as closed for failing to meet the open or conditionally open standards and the beach shall not be used for recreational shellfish harvest.
- (4) The department shall list a recreational shellfish beach as unclassified until complete sanitary data are available. The department shall list initially the beach as unclassified on the beach inventory.
- (5) In the event an open or conditionally open beach is suspected of being impacted by a source of pollution or other threat to public health, the department shall implement an emergency closure immediately. The closure shall remain in effect until the department's investigation verifies the beach is safe for recreational shellfish harvesting.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–280–030, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 90.70 RCW. 89–20–020 (Order 335), § 248–52–030, filed 9/27/89, effective 10/28/89.]

- WAC 246-280-040 Marine water quality testing. The department shall test marine water in recreational shellfish areas for fecal coliform bacteria according to sampling and analysis protocols under National Shellfish Sanitation Program Manual of Operations for commercial shellfish harvest areas.
- (1) The department shall establish the location of marine water sampling stations for each recreational shellfish beach to adequately reflect potential pollution sources for the area.
- (2) The department shall collect a minimum of fifteen samples at each station prior to an area receiving a classification. The department shall time each sampling to reflect potential adverse pollution events.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–280–040, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 90.70 RCW. 89–20–020 (Order 335), § 248–52–040, filed 9/27/89, effective 10/28/89.]

WAC 246-280-050 Shellfish meat quality standards and testing. (1) The department shall:

- (a) Periodically test shellfish meat samples for fecal coliform bacteria to provide supportive information for water quality data;
- (b) Establish a routine schedule for collection of shellfish samples for each beach; and
- (c) Sample all beaches classified as open or conditionally open at a frequency determined by the director.
- (2) The department shall conduct tests to identify the chemicals present in the shellfish tissue when a toxic chemical is suspected to impact a recreational beach. In the event of an imminent health hazard, the department shall implement an emergency closure.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–280–050, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 90.70 RCW. 89–20–020 (Order 335), § 248–52–050, filed 9/27/89, effective 10/28/89.]

WAC 246-280-060 Recreational shellfish beach sanitary survey. In addition to the evaluation of the shellfish growing waters, and before establishing a classification for the beach, the department shall conduct a sanitary survey of the shoreline and upland areas located adjacent to recreational shellfish beaches. The sanitary survey shall be updated as necessary to reflect changes in shoreline and upland sanitary conditions. A sanitary survey shall consist of:

- (1) Identifying and evaluating point source discharges in the vicinity of the beach;
- (2) Evaluating all on-site sewage disposal systems in the survey area; and
- (3) Evaluating impacts from other nonpoint sources in the area, such as animal waste and storm water.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–280–060, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 90.70 RCW. 89–20–020 (Order 335), § 248–52–060, filed 9/27/89, effective 10/28/89.]

WAC 246-280-070 PSP monitoring of recreational beaches. (1) The department shall conduct a paralytic shellfish poisoning (PSP) monitoring program for recreational shellfish beaches.

- (2) The department shall coordinate the monitoring program with the health officer. The joint plan of operation developed between the department and the health officer shall include the following elements:
- (a) A sampling schedule which includes the beaches sampled and the frequency of the sampling;
- (b) Designation of responsibility for a sample collection; and
- (c) A system of establishing beach closures due to PSP which includes:
- (i) Closing the beach when the level of toxin exceeds 80 micrograms of toxin per 100 grams of shellfish meat;
- (ii) Maintaining the beach closure until two consecutive samples of the same species test below the standard of 80 micrograms of toxin per 100 grams of shellfish meat; and
- (iii) Closing beaches suspected of posing a PSP threat to public health when they are located in a PSP-impacted area that cannot be sampled on a frequent basis. The beaches shall remain closed until samples verify the area is safe to reopen.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-280-070, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 90.70 RCW. 89-20-020 (Order 335), § 248-52-070, filed 9/27/89, effective 10/28/89.]

WAC 246-280-080 Public information and notification. The department shall develop guidelines describing an approved public information/public notification system. The guidelines shall include methods for public notification, public meetings, beach posting, public announcements, and other control mechanisms the jurisdictional health agency deems necessary. The department shall provide for a public notification process of beach classifications under the joint plan of operation.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-280-080, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 90.70 RCW. 89-20-020 (Order 335), § 248-52-080, filed 9/27/89, effective 10/28/89.]

Chapter 246–282 WAC SANITARY CONTROL OF SHELLFISH

WAC

WAC	
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WAC 246-282-001 Scope and purpose. These requirements, as authorized under chapter 69.30 RCW (chapter 144, Laws of 1955), establish minimum performance standards for the growing, harvesting, processing, packing, storage, transporting, and selling of shellfish for human consumption.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–282–001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 69.30.030. 78–08–059 (Order 163), § 248–58–001, filed 7/24/78; Regulation 58.001, effective 3/11/60.]

- WAC 246-282-010 Definitions. The following definitions shall apply in the interpretation and the implementation of these rules and regulations:
- (1) "Approved" means acceptable to the director based on his or her determination as to conformance with appropriate standards and good public health practice.
- (2) "Commercial quantity" means any quantity exceeding:
 - (a) Forty pounds of mussels;
 - (b) One hundred oysters;
 - (c) Fourteen horse clams;
 - (d) Six geoducks; or
 - (e) Fifty pounds of hard or soft shell clams.
- (3) "Department" means the state department of social and health services.
- (4) "Director" means the director of the division of health of the department of social and health services, or his or her authorized representative.
- (5) "Easily cleanable" means readily accessible and of such material and finish, and so fabricated that residue may be completely removed by approved cleaning methods.
- (6) "Food contact surfaces" means those surfaces of equipment and utensils with which the shellfish meat normally comes in contact, and those surfaces that drain onto surfaces that may come into contact with said food being processed.
- (7) "Person" means any individual, firm, corporation, partnership, company, association, or joint stock association, and the legal successor thereof.
- (8) "Person in charge" means an individual responsible for the supervision of employees and the management of any shellfish operation as defined in subsection (12) of this section.
- (9) "Sanitized" means the treatment of clean surfaces of equipment and utensils by an approved process which is effective in destroying microorganisms, including pathogens.
- (10) "Shellfish" means all varieties of fresh or frozen oysters, clams, or mussels, either shucked or in the shell, and all fresh or frozen edible products thereof.
- (11) "Shellfish growing areas" means the lands and waters in and upon which shellfish are grown for harvesting in commercial quantities or for sale for human consumption.
- (12) "Shellfish operation" means any activity in the harvesting, transporting, processing, to include, but not limited to culling, shucking, packing, and repacking or

shipping or reshipping of shellfish in commercial quantities or for sale for human consumption.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–282–010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 69.30.030 and 43.20.050. 85–21–048 (Order 296), § 248–58–005, filed 10/14/85. Statutory Authority: RCW 69.30.030. 78–08–059 (Order 163), § 248–58–005, filed 7/24/78.]

- WAC 246-282-020 Growing areas. (1) All shellfish to be sold as defined in RCW 69.30.010(2) in the state of Washington shall be obtained from approved growing areas or from approved growing areas outside the state that have programs of control and standards equivalent to that of the state of Washington.
- (2) Approved shellfish growing areas shall be located in areas not adversely affected by human waste, industrial or natural toxins, recreational use, or other sources of pollutants which may have a detrimental influence on the water quality of the shellfish growing beds and subsequent hazards to the human consumers of shellfish.
- (3) No commercial quantities of shellfish or shellfish to be sold as defined in RCW 69.30.010(2), for human consumption, shall be harvested from growing areas which are not approved as provided herein: *Provided*, That permission may be granted by the director for the removal of shellfish from nonapproved growing areas for relaying to approved growing areas under the following conditions:
- (a) Shellfish shall be relayed to a designated, approved growing area for a minimum of two weeks or for a longer time period as prescribed by the director.
- (b) Relaying and subsequent removal from the approved area for sale or shipment shall be under the supervision of the director.
- (c) Records shall be kept showing growing areas from which the shellfish were taken, where relayed, dates of relaying, and dates of harvesting.
- (4) All boats, oyster harvesters, and floats used for harvesting or transporting shellfish shall be so constructed, operated, and maintained as to prevent contamination or deterioration of the shellfish. Approved facilities shall be provided for the disposal of human waste.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–282–020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 69.30.030 and 43.20.050. 85–21–048 (Order 296), § 248–58–010, filed 10/14/85. Statutory Authority: RCW 69.30.030. 78–08–059 (Order 163), § 248–58–010, filed 7/24/78; Regulation 58.010, effective 3/11/60.]

- WAC 246-282-030 Storage, cleansing and washing and shipping of shell stock. (1) Shell stock shall be stored, handled, and shipped under such temperature conditions as will keep them alive, and shall be protected from contamination at all times.
- (2) All shell stock prior to opening or shipping shall be reasonably clean so that mud, sand, and extraneous material will not be transferred to the opened product during processing.
- (3) Water used for washing, or "wet storage" (natural storing and cleansing), of shell stock shall be obtained from an approved growing area, or from other sources

which meet or exceed the water quality standards of an approved growing area.

(4) Wet storage of shell stock may be practiced only upon approval of the director. A detailed description and map denoting the location of the wet storage area shall accompany the request.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-282-030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 69.30.030. 78-08-059 (Order 163), § 248-58-020, filed 7/24/78; Regulation 58.020, effective 3/11/60.]

- WAC 246-282-040 Shucking of shellfish. (1) Shell-fish shall be shucked in a manner that will minimize contamination. Only live shellfish shall be shucked. Shucked shellfish shall be processed within one hour after opening or shall be rapidly cooled to a product temperature of forty-five degrees Fahrenheit or less within two hours after shucking.
- (2) Shucking containers shall be rinsed with running tap water before each filling. Shucker's colanders shall be rinsed with running tap water at two and one-half hour intervals or less during use.
- (3) Shells from which meats have been shucked shall be removed from the plant at sufficient intervals to prevent the interference with the sanitary operation of the plant.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-282-040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 69.30.030. 78-08-059 (Order 163), § 248-58-030, filed 7/24/78; Regulation 58.030, effective 3/11/60.]

- WAC 246-282-050 Packing of shucked shellfish. (1) Shucked shellfish shall be protected from contamination during all phases of processing and shall be packed in approved containers which are clean, and free from contamination.
- (2) Shucked shellfish shall be maintained at forty degrees Fahrenheit or less until received by the consumer. A temperature of thirty-four degrees Fahrenheit to forty degrees Fahrenheit shall be maintained in refrigerators where shucked shellfish are stored.
- (3) Shellfish which are to be marketed as a frozen product shall be frozen as quickly as practicable and maintained at a product temperature of zero degrees Fahrenheit or less until received by the consumer.
- (4) The packing of shucked shellfish shall take place in the same plant in which the shellfish are shucked, unless specific approval for repacking is granted by the director. Repacking plants shall meet all requirements as specified for packing plants. Frozen shucked shellfish shall not be repacked.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-282-050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 69.30.030. 78-08-059 (Order 163), § 248-58-040, filed 7/24/78; Regulation 58.040, effective 3/11/60.]

WAC 246-282-060 Personal health and cleanliness.

(1) Persons ill with or the carrier of a communicable disease which is transmissable through food and is in the infectious stage, or persons having exposed boils, infected lesions or wounds, or similar skin infections, or persons having an acute respiratory infection shall not

work in any growing area, shucking, packing or repacking plant in any capacity where they might contaminate the shellfish or food contact surfaces with pathogenic organisms. Both the person in charge and the employee shall be responsible for compliance with the requirements of this section.

(2) Persons who shuck or handle shucked shellfish shall wear clean, waterproof aprons or coats and clean clothing that can be easily cleaned and shall practice good personal cleanliness during all periods of duty. They shall wash their hands thoroughly with soap and warm water before starting to work and as often thereafter as may be necessary to remove soil and contamination. Gloves or other protective gear worn on the hands shall be made of waterproof, easily cleanable material and shall be clean. When manual handling of shucked shellfish becomes necessary, sanitized rubber gloves shall be worn or the hands shall be thoroughly cleaned immediately before such handling. Effective means shall be taken to keep hair from shellfish (shucked meats) and from food contact surfaces.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-282-060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 69.30.030. 78-08-059 (Order 163), § 248-58-050, filed 7/24/78; Regulation 58.050, effective 3/11/60.]

WAC 246-282-070 Construction and maintenance. (1) Equipment and utensils: All food contact surfaces of equipment and utensils shall be constructed of nontoxic, corrosion resistant, and nonabsorbent materials, designed to be easily cleanable and shall be clean and in an approved condition of repair. Equipment shall be installed and maintained so that it and adjacent areas can be readily cleaned. Articles intended for single service use shall be used only once and then discarded.

Utensils and food contact surfaces of equipment shall be cleaned, sanitized and stored in an approved manner so as to be protected from recontamination. Cleaning and sanitization shall occur before use and at such intervals as necessary to preclude contamination of the shucked product.

Nonfood contact surfaces of equipment shall be constructed of corrosion resistant and nonabsorbent materials, designed to be easily cleanable and shall be clean and in an approved condition of repair.

(2) Physical facilities: The plant shall be so arranged to facilitate the flow of the product through processing and storage areas in a manner that will preclude contamination. Shucking and packing operations shall be conducted in separate rooms. Only authorized persons shall be allowed in the packing room during periods of operation.

Interior surfaces of rooms or areas where shellfish are stored, processed or utensils or hands are washed, and in walk—in refrigerators and freezers shall be easily cleanable, clean and in an approved condition of repair.

Rooms for utensil and packaging material storage shall be provided, and separate from areas which shall be provided for employee clothing storage. These areas shall be separate and apart from the shucking and packing rooms. Approved lighting, heating and ventilation shall be provided. Approved measures for control of rodents and flies, roaches, and other insects on the premises shall be utilized. Live animals shall be excluded from all areas of the plant.

(3) Sanitary facilities: Hot and cold water adequate in quality and quantity, and under pressure shall be provided or easily accessible to all rooms in which shellfish are processed or utensils are washed. The water supply, plumbing, sewage, garbage and rubbish disposal, handwashing, toilet and other facilities shall be installed, operated, and maintained in an approved manner.

Ice shall be from an approved source and shall be stored and handled in a manner as to be protected from contamination.

Handwashing facilities consisting of a lavatory or lavatories and equipped with hot and cold or tempered running water, hand—cleansing soap or detergent, single service towels or approved hand drying devices shall be located and maintained to permit convenient use by all employees in shellfish processing areas, utensil washing areas, and toilet rooms or vestibules. Such facilities shall be kept clean and in an approved condition of repair.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-282-070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 69.30.030. 78-08-059 (Order 163), § 248-58-060, filed 7/24/78; Regulation 58.060, effective 3/11/60.]

WAC 246-282-080 Identification and records. (1) Shellfish shall be so identified by label, tag or other permanent means at the wholesale or retail level that any given container of shucked meats or lot of shell stock can be traced to the original growing area source(s).

(2) Shipments of shellfish in the shell shall be accompanied by a tag, label or other mark showing that the shipper has been duly certified by the state in which the growing area is located.

(3) Shucked shellfish shall be packed, shipped and sold retail in approved containers that are legibly marked by embossing, lithographing, or other permanent means with the name, address, and certification number of the packer, and the date packed or coded in such a manner that the date packed can be determined. Fresh packs shall be labeled with wording equivalent to "keep refrigerated," and frozen packs shall be labeled with wording equivalent to "keep frozen."

(4) All shippers, reshippers, packers, repackers, and wholesalers shall keep an accurate record of all lots of shellfish received, shipped and sold. Retailers shall keep a record of all lots received. Such records shall be kept on file for a minimum of six months.

(5) Information recorded by the harvester-shipper shall include: (a) Location of harvesting area(s) by name or code, (b) name and quantity of shellfish, (c) date of harvest, (d) date shipped.

(6) Shucker-packers and repackers shall record the following information: (a) Location of harvesting area(s) by name or code, or name of harvester, (b) name and quantity of shellfish, (c) date of harvest or date received, and (d) packing date.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–282–080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 69.30.030. 78–08–059 (Order 163), § 248–58–070, filed 7/24/78; Regulation 58.070, effective 3/11/60.]

WAC 246-282-090 Certificate of compliance—Certificate of approval—Suspension for revocation of certificate of approval—Licensure—Revocation of license. (1) Only shellfish bearing, upon the tag, bill of lading, label or container as required in WAC 248-58-070(2), a certificate of compliance with the sanitary requirements of this state, or a state, territory, province of, or country of origin whose requirements are equal or comparable to these regulations, may be sold or offered for sale for human consumption in the state of Washington.

- (2) No person shall possess a commercial quantity of shellfish or sell or offer to sell for human consumption shellfish in the state which have not been grown, harvested, shucked, packed, or shipped in accordance with the provisions of these regulations or chapter 69.30 RCW.
- (3) Certificates of approval for shellfish growing areas and/or for shellfish operations, as hereinabove defined, shall be issued and administered as prescribed in chapter 69.30 RCW, and may be denied, suspended, or revoked for any failure or refusal to maintain the sanitary requirements or to comply with the provisions of these regulations or chapter 69.30 RCW.
- (4) No person shall operate a "shellfish operation," as defined hereinabove, without having first obtained a valid operating license issued by the director. Each license shall be issued only for the shellfish operation and person named in the application and no license shall be transferable or assignable except with the written approval of the director. An operating license will be issued to any person who shall evidence:
- (a) Possession of, or an approved application for, a valid certificate of approval as described hereinabove;
- (b) Continued compliance by the licensee, the licensee's employees, or those under the licensee's supervision, with the rules and regulations herein and with chapter 69.30 RCW which compliance, in part, shall include the licensee's processing and/or sale of shellfish which have been harvested only from growing areas certified by the director in the name of the licensee or the person from whom the licensee has obtained said shellfish.
- (5) The department shall have cause to deny, revoke, or suspend the license required herein where any licensee has:
- (a) Had his or her certificate of approval, as defined above, and as issued by the department, revoked, suspended, or denied, for any reason;
- (b) Failed or refused to comply with any of the rules and regulations of the state board of health or chapter 69.30 RCW;
- (c) Harvested shellfish from any growing area which does not have a valid certificate of approval issued in the name of said licensee or in the name of the person from whom the licensee has obtained said shellfish;

- (d) Obtained or attempted to obtain an operating license, certificate of compliance, or certificate of approval by fraudulent means or misrepresentation.
- (6) All licenses and certificates issued under the provisions of these regulations shall be posted in a conspicuous place on the licensed premises. The licensee, or at least one employee thereof, shall have a certificate of approval on his or her person while engaged in the harvesting of shellfish. Such certificates of approval shall be provided by the department. All licenses and certificates of approval shall expire on the thirtieth day of September each year.
- (7) Certificates of approval shall be displayed, upon request, to an authorized representative of the department, a fisheries patrol officer, or an ex officio patrol officer. Failure to do so subjects the grower to the penalty provisions of this chapter, as well as immediate seizure of the shellfish by the representative or officer.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–282–090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 69.30.030 and 43.20.050. 85–21–048 (Order 296), § 248–58–080, filed 10/14/85. Statutory Authority: RCW 69.30.030. 78–08–059 (Order 163), § 248–58–080, filed 7/24/78; Regulation 58.080, effective 3/11/60.]

- WAC 246-282-100 Notice of decision-Adjudicative proceeding. (1) The department's notice of a denial, suspension, modification, or revocation of a license shall be consistent with RCW 43.20A.205, as applicable to the department of health under RCW 43.70.900. An applicant or license holder has the right to an adjudicative proceeding to contest the decision.
- (2) The department's notice of imposition of a civil fine shall be consistent with RCW 43.20A.215, as applicable to the department of health under RCW 43.70,900. A person upon whom the department imposes a civil fine has the right to an adjudicative proceeding to contest the decision.
- (3) A license applicant or holder or a person upon whom the department imposes a civil fine, contesting a department decision, shall within twenty-eight days of receipt of the decision:
- (a) File a written application for an adjudicative proceeding by a method showing proof of receipt with the Office of Appeals, P.O. Box 2465, Olympia, WA 98504; and
 - (b) Include in or with the application:
- (i) A specific statement of the issue or issues and law involved;
- (ii) The grounds for contesting the department decision; and
 - (iii) A copy of the contested department decision.
- (4) The proceeding is governed by the Administrative Procedure Act (chapter 34.05 RCW), this chapter, and chapter 248–08 WAC. If a provision in this chapter conflicts with chapter 248–08 WAC, the provision in this chapter governs.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–282–100, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 34.05 RCW and RCW 69.30.030. 90–06–049 (Order 040), § 248–58–085, filed 3/2/90, effective 3/2/90.]

- WAC 246-282-110 Administrative provisions. (1) The person in charge of shellfish growing areas or processing plant operations shall ensure operations are conducted in a manner complying with the requirements of these regulations. The person in charge shall periodically inspect the shellfish operations to determine compliance with these regulations, and shall take measures to correct any deficiencies thereby revealed.
- (2) The director shall have access to and be permitted to inspect any and all areas comprising the shellfish operation for the purpose of determining compliance with these regulations and chapter 69.30 RCW, or for the purpose of determining whether any person, shellfish, or condition in the shellfish operation constitutes a nuisance or a threat to the public health.
- (a) In the course of such inspection, the director may, among other things, examine or sample the shellfish in the shellfish operation as often as necessary to determine its safeness for human consumption, and he or she may also examine any and all pertinent records pertaining to shellstock, shellfish, or operational supplies purchased, received, or used, and records pertaining to persons employed.
- (b) If, after the inspection of a shellfish operation, the director finds such operation fails to comply with the requirements of the law, rules and regulations, he or she shall issue to the person in charge of the shellfish operation a written order specifying the manner in which the operation fails to comply with the law, rules and regulations and which sets out a specific and reasonable period of time for correction of the violations.
- (c) In the event the person in charge of the shellfish operation fails to correct the violations as required by the order of the director, the director may revoke the certificate of compliance and/or license of such person and/or initiate such legal enforcement proceeding as authorized by law.
- (d) During or after an investigation or inspection of a shellfish operation, the director may, if he or she suspects the shellfish are unsafe for human consumption, give to the owner or person in charge of the shellfish operation a written hold order prohibiting the disposition or sale of the shellfish pending the director's further investigation of the shellfish's safety. The person in charge shall thereafter cease from offering such shellfish for human consumption and shall store such shellfish in a suitable place as prescribed by the director until the hold order is lifted or modified by the director or by a court of competent jurisdiction. Shellfish placed under a hold order shall not be destroyed for at least two days and shall not be held longer than fifteen days; however, upon a finding that the shellfish are safe for human consumption, the director may release them immediately.
- (e) If, during an inspection of a shellfish harvesting operation, the owner or person in charge of the operation fails to immediately display his or her certificate of approval upon request from an authorized representative of the department, a fisheries patrol officer, or an ex officio patrol officer, a written hold order may be issued prohibiting the disposition or sale of the shellfish or the shellfish may immediately be seized. If a hold order is

issued, the person in charge shall thereafter cease from offering such shellfish for human consumption and shall store such shellfish in a suitable place as prescribed by the director until the hold order is lifted or modified by the director or by a court of competent jurisdiction. Shellfish placed under a hold order or seizure shall not be destroyed for at least two days and shall not be held longer than fifteen days; however, upon a finding that the shellfish are safe for human consumption, the director shall determine disposition. If the director determines that the operation is certified, the shellfish shall be released to the owner or person in charge of the operation. If the director determines that the operation is not certified, the director may release the shellfish according to his or her discretion.

- (f) If after investigation the director determines the shellfish are unsafe for human consumption, he or she shall give the owner or person in charge of the shellfish operation a written abatement order, which abatement order may require any or all of the following measures:
- (i) A permanent prohibition against the sale or disposition of the shellfish for human consumption;
- (ii) Immediate destruction of the shellfish in question by measures such as denaturing and placement in a sanitary landfill. Such destruction shall be accomplished by at least two employees of the department or authorized representatives.
- (iii) At the discretion of the director, shellfish having been found to be unsafe for human consumption may be relayed to an approved growing area for subsequent reharvest.
- (g) When the director, after conducting an appropriate investigation, determines either that:
- (i) A shellfish operation or employee is transmitting a disease; or
- (ii) There is a substantial risk a shellfish operation or employee may be transmitting a disease, he or she may thereafter give to the owner or person in charge of the shellfish operation an abatement order, which order may require any or all of the following measures:
- (A) Immediate closure of the shellfish operation until, in the opinion of the director, no further danger of a disease outbreak exists;
- (B) Immediate exclusion of the employee from all shellfish operations or food service establishments;
- (C) Restriction of the employee's service to some area of the operation where there would be no danger of transmitting disease.
- (h) As an alternative to the abatement order described in subsection (2)(g) of this section, the director may require any or all of the employees to submit to adequate medical and laboratory examinations, including examination of their bodily discharges.
- (i) No person shall remove or alter a notice or tag constituting a hold order or abatement order placed on the shellfish by the director, and neither such shellfish nor its container shall be relabeled, repacked, reprocessed, altered, disposed of, destroyed, or released without permission of the director, except on order by a court of competent jurisdiction.

(j) In the event the person in charge of the shellfish operation fails to comply with either the hold order or the abatement order described above, the director may revoke the certificate of compliance and/or license of such person and/or initiate such legal enforcement proceedings as are authorized by law; except that the director may undertake summary abatement of the shellfish, an article, or a condition which is so severely contaminated or contaminating that a delay in abatement until legal enforcement proceedings could be had would pose a grave threat to the public health.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–282–110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 69.30.030 and 43.20.050. 85–21–048 (Order 296), § 248–58–090, filed 10/14/85. Statutory Authority: RCW 69.30.030. 78–08–059 (Order 163), § 248–58–090, filed 7/24/78; Regulation 58.090, effective 3/11/60.]

WAC 246-282-120 Penalty clause. Any person found violating any of the provisions of these regulations or chapter 69.30 RCW shall be guilty of a gross misdemeanor, and upon conviction thereof shall be subject to a fine of not less than twenty-five dollars nor more than one thousand dollars, or imprisonment in the county jail of the county in which the offense was committed for not less than thirty days nor more than one year, or to both fine and imprisonment.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–282–120, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 69.30.030 and 43.20.050. 85–21–048 (Order 296), § 248–58–500, filed 10/14/85. Statutory Authority: RCW 69.30.030. 78–08–059 (Order 163), § 248–58–500, filed 7/24/78.]

WAC 246-282-130 Separability clause. Should any section, paragraph, clause or phrase of these rules and regulations be declared unconstitutional or invalid for any reason, the remainder of said rules and regulations shall not be affected thereby.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–282–130, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 69.30.030. 78–08–059 (Order 163), § 248–58–900, filed 7/24/78.]

WAC 246-282-990 Shellfish program certification fees. (1) Annual certificate fees shall be:

Type of Operation	Annual Fee
Reshipper	\$110
Repacker	\$290
Shellstock Shipper	
0 – 10 Acres	\$110
11 – 49 Acres	\$150
50 – 99 Acres	\$180
100+ Acres	\$255
Shucker-Packer	
1 – 5 Shuckers	\$180
6 - 10 Shuckers	\$225
11 – 15 Shuckers	\$255
16 - 30 Shuckers	\$290
30 – 50 Shuckers	\$300
50+ Shuckers	\$325

(2) Type of operations are defined as follows:

- (a) "Reshipper" shall mean shippers transshipping shucked stock in original containers, or shellstock from certified shellfish shippers to other dealers or to final consumers. (Reshippers are not authorized to shuck or repack shellfish.)
- (b) "Repacker" shall mean shippers, other than the original shucker, packing shucked shellfish into containers for delivery to the consumer. A repacker may shuck shellfish or act as a shellstock shipper if the repacker has the necessary facilities.
- (c) "Shellstock shipper" shall mean shippers growing, harvesting, buying, or selling shellstock. Shellstock shippers are not authorized to shuck shellfish or to repack shucked shellfish.
- (d) "Shucker-packer" shall mean shippers shucking and packing shellfish. A shucker-packer may act as a shellstock dealer.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-282-990, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 43.20A.055. 85-12-029 (Order 2236), § 440-44-065, filed 5/31/85; 84-13-006 (Order 2109), § 440-44-065, filed 6/7/84; 83-15-021 (Order 1991), § 440-44-065, filed 7/14/83. Statutory Authority: 1982 c 201. 82-13-011 (Order 1825), § 440-44-065, filed 6/4/82.]

Chapter 246-290 WAC PUBLIC WATER SUPPLIES

WAC

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GENERAL PROVISIONS

WAC 246-290-001 Purpose and scope. (1) The purpose of these rules is to define basic regulatory requirements and to protect the health of consumers using public drinking water supplies.

(2) The rules of this chapter are specifically designed to ensure:

(a) Adequate design, construction, sampling, management, and operation practices; and

(b) Provision of high quality drinking water in a reliable manner and in a quantity suitable for intended use.

(3) Purveyors shall be responsible for complying with the regulatory requirements of this chapter.

(4) These rules are intended to conform with the intent of P.L. 93-523, the Federal Safe Drinking Water Act of 1974, and the Safe Drinking Water Act Amendments of 1986, P.L. 99-339.

(5) The rules set forth are adopted under chapter 43-.20 RCW. Other statutes relating to this chapter are:

(a) Chapter 43.20A RCW, Department of social and health services;

(b) Chapter 43.XXXXXX RCW (chapter 9, Laws of 1989 1st Extraordinary Session), department of health;

(c) Chapter 70.05 RCW, Local health department, boards, officers—Regulations;

(d) Chapter 70.116 RCW, Public Water System Coordination Act of 1977;

(e) Chapter 70.119 RCW, Public water supply systems—Certification and regulation of operators; and

(f) Chapter 70.119A RCW, Public water supply systems—Penalties and compliance.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-290-001, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99-339. 89-21-020 (Order 336), § 248-54-005, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 34.04.045. 88-05-057 (Order 307), § 248-54-005, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83-19-002 (Order 266), § 248-54-005, filed 9/8/83.]

WAC 246-290-010 Definitions. (1) Abbreviations:

kPa - kilo pascal (SI units of pressure),

m - meter,

MCL - maximum contaminant level,

mg/L - milligrams per liter,

MID - maximum instantaneous demand,

mL - milliliter,

mm - millimeter,

MPN - most probable number of coliform bacteria per 100 mL,

NTNC - nontransient noncommunity,

NTU - nephelometric turbidity unit,

pCi/L - picocuries per liter,

psi - pounds per square inch,

TNC - transient noncommunity,

ug/L - micrograms per liter,

umhos/cm - micromhos per centimeter,

- WFI water facilities inventory and report form,
- (2) "Acute" means posing an immediate risk to health.
- (3) "Contaminant" means any substance present in drinking water which may adversely affect the health of the consumer and/or the aesthetic qualities of the water.
- (4) "Cross-connection" means any physical arrangement connecting a public water system, directly or indirectly, with anything other than another potable water system, capable of contaminating the public water system.
- (5) "Department" means the Washington state department of health.
- (6) "Disinfection" means the use of chlorine or other agent or process, approved by the department for the purpose of killing or inactivating microbiological organisms, including pathogenic and indicator organisms.
- (7) "Distribution system" means that portion of a public water supply system which stores, transmits, pumps, and distributes water to consumers.
- (8) "Fire flow" means the rate of water flow needed to fight fires as defined by applicable codes.
- (9) "Guideline" means a department document intended to assist the purveyor in meeting a requirement of a rule.
- (10) "Health officer" means the health officer of the city, county, city—county health department or district, or an authorized representative.
- (11) "Hydraulic analysis" means the study of the water system network: To evaluate water flows within the distribution system under worst case conditions; such as, maximum hourly flow plus fire flow when required or maximum instantaneous demand (MID) when fire flow is not required. Hydraulic analysis includes consideration of all factors affecting system energy losses.
- (12) "Maximum contaminant level (MCL)" means the maximum permissible level of a contaminant in water delivered to any user of a public water system as measured at the locations identified in WAC 248-54-165, Table 4.
- (13) "Maximum contaminant level violation" means a confirmed measurement above the MCL and for a duration of time, where applicable, as outlined under WAC 248-54-175.
- (14) "Maximum instantaneous demand (MID)" means the maximum rate of water use, excluding fire flow, experienced or expected within a defined service area at any instant in time.
 - (15) "Potable" means suitable for drinking.
- (16) "Primary standards" means standards based on chronic or acute human health effects.
- (17) "Protected ground water source" means a ground water source shown to the satisfaction of the department to be protected from any potential sources of contamination on the basis of hydrogeologic data and/or satisfactory water quality history.
- (18) "Public water system" (refer to WAC 248-54-006).
- (19) "Purveyor" means any agency or subdivision of the state or any municipal corporation, firm, company,

- mutual or cooperative association, institution, partnership, or person or any other entity that owns or operates a public water system. It also means the authorized agents of any such entities.
- (20) "Regularly" means four hours or more per day for four days or more per week.
- (21) "Resident" means an individual living in a dwelling unit served by a public water system.
- (22) "Secondary standards" means standards based on factors other than health effects.
- (23) "Service" means a connection to a public water system designed to serve a single family residence, dwelling unit, or equivalent use. If the facility has group home or barracks—type accommodations, three persons will be considered equivalent to one service.
- (24) "Standard methods" means the most recently published edition of the book, titled Standard Methods for the Examination of Water and Waste Water, jointly published by the American Public Health Association, American Water Works Association (AWWA), and Water Pollution Control Federation. This book is available through public libraries or may be ordered from AWWA, 6666 West Quincy Avenue, Denver, Colorado 80235.
- (25) "Water facilities inventory form" (WFI) means the department form which summarizes each public water system's characteristics.
- (26) "Well field" means a group of wells owned and/or controlled by one purveyor which:
- (a) Draw from the same aquifer or aquifers as determined by comparable inorganic chemical analysis; and
- (b) Discharge water through a common pipe and the common pipe shall allow for collection of a single sample before the first distribution system connection.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–010, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99–339. 89–21–020 (Order 336), § 248–54–015, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–015, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83–19–002 (Order 266), § 248–54–015, filed 9/8/83.]

- WAC 246-290-020 Applicability. (1) Public water system shall mean any system, excluding a system serving only one single-family residence, providing piped water for human consumption, including any:
- (a) Collection, treatment, storage, or distribution facilities under control of the purveyor and used primarily in connection with such system; and
- (b) Collection or pretreatment storage facilities not under control of the purveyor primarily used in connection with such system.
- (2) The rules of this chapter shall apply to all public water systems except public water systems meeting the following conditions:
- (a) Consists only of distribution and/or storage facilities and does not have any source or treatment facilities;
- (b) Obtains all of its water from, but is not owned by, a public water system where the rules of this chapter apply;
 - (c) Does not sell water directly to any person;

- (d) The water distribution facilities are subject to inspection or regulation by a state or local agency other than the department. Bottled water operations fall under Federal Food and Drug Administration regulations, but must obtain water from a source approved by the department or local health jurisdiction; and
- (e) Is not a passenger-conveying carrier in interstate commerce.
- (3) Public water systems shall be categorized as follows:
 - (a) A Group A water system shall be a system:
- (i) With fifteen or more service connections, regardless of the number of people; or
- (ii) Serving an average of twenty-five or more people per day for sixty or more days within a calendar year, regardless of the number of service connections.

Group A water systems are further defined as community and noncommunity water systems.

- (b) Community (residential) water system means any Group A public water system:
- (i) With fifteen or more service connections used by residents for one hundred eighty or more days within a calendar year, regardless of the number of people; or
- (ii) Regularly serving twenty-five or more residents for one hundred eighty or more days within the calendar year, regardless of the number of service connections.

Examples of a community (residential) water system might include a municipality, subdivision, mobile home park, apartment complex, college with dormitories, nursing home, or prison.

- (c) Noncommunity water system means a Group A public water system which is not a community (residential) water system. Noncommunity water systems are further defined as:
- (i) Nontransient (NTNC) (school/business/industry) water system means a noncommunity water system regularly serving twenty-five or more of the same nonresidents for one hundred eighty or more days within a calendar year.

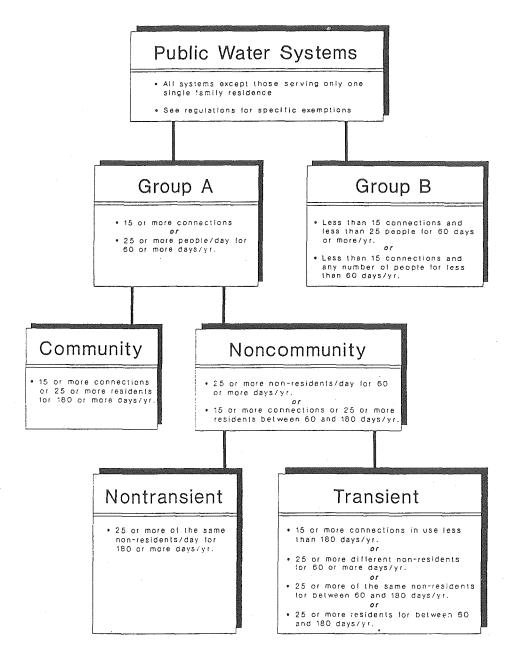
Examples of a NTNC water system might include a school, day care center, or a business, factory, motel, or restaurant with twenty-five or more employees on-site.

- (ii) Transient (TNC) (food/lodging/recreation) water system means a noncommunity water system:
- (A) Having fifteen or more service connections used less than one hundred eighty days within a calendar year; or
- (B) Serving twenty-five or more different nonresidents for sixty or more days within a calendar year; or
- (C) Serving twenty-five or more of the same nonresidents for sixty or more days, but less than one hundred eighty days within a calendar year; or
- (D) Serving twenty-five or more residents for sixty or more days, but less than one hundred eighty days within a calendar year.

Examples of a TNC water system might include a restaurant, tavern, motel, campground, state or county park, an RV park, vacation cottages, highway rest area, or church.

- (d) A Group B water system means a public water system which is not a Group A water system. This would include a water system with less than fifteen service connections and serving:
- (i) An average of less than twenty-five people for sixty or more days within a calendar year; or
- (ii) Any number of people for less than sixty days within a calendar year.
- (4) A public water system meeting more than one of the categories described in this section shall be classified by the department in the following order:
 - (a) Community water system;
 - (b) NTNC water system;
 - (c) TNC water system; and
 - (d) Group B water system.

TABLE 1



[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–020, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99–339. 89–21–020 (Order 336), § 248–54–006, filed 10/10/89, effective 11/10/89.]

WAC 246-290-030 General administration. (1) The department and the health officer for each local health jurisdiction shall develop a joint plan of operation listing the roles of each agency for administering these rules. This plan shall:

(a) Specifically designate those systems for which the department and local health officer have primary responsibility;

- (b) Provide for a minimum acceptable level of water system supervision;
- (c) Be signed by the department and the chairperson of the local board of health; and
 - (d) Be updated as needed.

Wherever in these rules the term "department" is used, the term "health officer" may be substituted based on the terms of this plan of operation.

- (2) The department shall, upon request, review and report on the adequacy of water supply supervision to both the state and local boards of health.
- (3) The local board of health may adopt rules covering public water systems within its jurisdiction for which

the health officer has assumed primary responsibility. Adopted local board of health rules shall be:

- (a) No less stringent than chapter 248-54 WAC; and
- (b) Revised, if necessary, within twelve months after the effective date of revised state board of health rules. During this time period, existing local rules shall remain in effect, except provisions of the revised state board of health rules which are more stringent than the local board of health rules shall apply.
- (4) The health officer may waive any or all requirements of these rules for **Group B** water systems with two connections where the health officer has assumed primary responsibility for these systems.
- (5) For those public water systems where the health officer has assumed primary responsibility, the health officer may approve project reports and construction documents in accordance with engineering criteria approved by the department.
- (6) An advisory committee shall be established to provide guidance to the department on drinking water issues. The committee shall be appointed by the department and conform to department policies for advisory committees. The committee shall be composed of representatives of public water systems, public groups, agencies, and individuals having an interest in drinking water.
- (7) The department may develop guidelines to clarify sections of the rules as needed and make these available for distribution.
- (8) Fees may be charged by the department as authorized in chapter 43.20A RCW and by local health agencies as authorized in RCW 70.05.060 to recover all or a portion of the costs incurred in administering these rules.
- (9) All state and local agencies involved in review, approval, surveillance, testing, and/or operation of public water systems, or issuance of permits for buildings or sewage systems shall be governed by these rules and any decisions of the department.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–030, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99–339. 89–21–020 (Order 336), § 248–54–025, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–025, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83–19–002 (Order 266), § 248–54–025, filed 9/8/83.]

WAC 246-290-040 Requirements for engineers. (1) All water system plans, project reports, and construction documents shall be prepared by a professional engineer licensed in the state of Washington under chapter 18.43 RCW and shall bear the engineer's seal and signature. Exceptions to this requirement are:

- (a) Minor projects not requiring engineering expertise as determined by the department under WAC 248-54-096(2); and
- (b) Public water systems serving less than ten service connections consisting of a simple well and pressure tank with one pressure zone and not providing special treatment or having special hydraulic considerations. These systems may be designed by a water system designer

certified by the local health jurisdiction in those counties having a recognized water system designer program.

- (2) 'A Construction Report For Public Water System Projects' shall be submitted to the department on a form provided by the department within sixty days of completion and before use of any project approved by the department. The form shall:
 - (a) Be signed by:
 - (i) A professional engineer; or
- (ii) In the case of projects not requiring engineering expertise as outlined in this section, the certified designer.
 - (b) State:
- (i) The project is constructed and is substantially completed in accordance with approved construction documents; and
- (ii) In the opinion of the engineer, based on information available, the installation, testing, and disinfection of the system was carried out per department rules.
- (3) It shall be the responsibility of the purveyor to assure the requirements of this section are fulfilled before the use of any completed project. When necessary, an updated water facilities inventory shall accompany the 'Construction Report For Public Water System Projects' form.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as \$ 246–290–040, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99–339. 89–21–020 (Order 336), \$ 248–54–035, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), \$ 248–54–035, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83–19–002 (Order 266), \$ 248–54–035, filed 9/8/83.]

WAC 246-290-050 Enforcement. When any public water system is out of compliance with these rules, the department may initiate appropriate enforcement actions, regardless of any prior approvals issued by the department. These actions may include any one or combination of the following:

- (1) Issuance of letters instructing or requiring appropriate corrective measures;
- (2) Issuance of a compliance schedule for specific actions necessary to achieve compliance status;
- (3) Issuance of departmental orders requiring purveyors to submit project reports, construction documents, and construction report forms;
- (4) Issuance of departmental orders requiring specific actions or ceasing unacceptable activities within a designated time period;
- (5) Issuance of departmental orders to stop work and/or refrain from using any public water system or improvements thereto until all written approvals required by statute or rule are obtained;
- (6) Imposition of civil penalties for failure to comply with departmental orders may be issued for up to 5,000 dollars per day per violation under authority of chapter 70.119A RCW; and
- (7) Legal action may be taken by the attorney general or local prosecutor. The legal action may be criminal or civil.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-290-050, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99-339. 89-21-020 (Order 336), § 248-54-045, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 34.04.045. 88-05-057 (Order 307), § 248-54-045, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83-19-002 (Order 266), § 248-54-045, filed 9/8/83.]

WAC 246-290-060 Variances, exemptions, and waivers. (1) General. The state board of health may grant variances, exemptions, and waivers of the requirements of this chapter according to the procedures outlined in this section. The procedures outlined in this section rather than the procedures outlined in WAC 248-08-596 shall govern the board's consideration of requests for variances, exemptions, and waivers of the requirements of this chapter. Consideration by the board of requests for variances, exemptions, and waivers shall not be considered adjudicative proceedings as that term is defined in chapter 34.05 RCW. Statements and written material regarding the request may be presented to the board at or before the public hearing wherein the application will be considered. Allowing cross-examination of witnesses in such matters shall be within the discretion of the board.

- (2) Variances. The state board of health may grant a variance to a public water system if the system has applied the best available technology as identified by the environmental protection agency (EPA) and still cannot meet an MCL as specified in section 1415, P.L. 99–523 as amended by P.L. 99–339. Procedures for obtaining a variance are identified under subsection (5) of this section.
- (3) Exemptions. The state board of health may grant an exemption to a public water system if the system cannot meet an MCL or provide the required treatment in a timely manner, or both, as specified under section 1416, P.L. 93-523 as amended by P.L. 99-339. Procedures for obtaining an exemption are identified under subsection (5) of this section.
- (4) Waivers. The state board of health may grant a waiver to a public water system if the system cannot meet the requirements of these regulations pertaining to any subject not covered by EPA regulations. Procedures for obtaining a waiver are identified under subsection (5) of this section.
 - (5) Procedures.
- (a) The state board of health may grant a variance or exemption to a public water system after the purveyor completes the following actions:
- (i) The purveyor applies to the department. The application may be in the form of a letter. It must state clearly the reason for the request and what actions the purveyor took to meet the requirement;
- (ii) The purveyor provides notice to customers of the purveyor's application for a variance or exemption and provides proof of such notice to the department;
- (iii) The department prepares a schedule of compliance and recommendations for the state board of health to condition the granting of a variance or exemption. The schedule must address:

- (A) Actions the system must undertake within the time frame specified; and
- (B) Implementation of such control measures the department may require in the interim until the purveyor completes the actions required in subsection (5)(a)(ii)(A) of this section.
- (iv) The state board of health provides notice for and conducts a public hearing on the purveyor's request and the department's recommendation.
- (b) The state board of health may grant a waiver to a public water system after completing the following actions:
- (i) The purveyor applies to the department. The application may be in the form of a letter. It must clearly state the reason for the request;
- (ii) The purveyor provides notice to customers of the purveyor's application for a waiver and provides proof of such notice to the department;
- (iii) The department prepares a recommendation to the state board of health for the granting or denial of the waiver request; and
- (iv) The state board of health provides notice for and conducts a public hearing on the purveyor's request.
- (c) The state board of health shall not grant a variance, exemption, or waiver unless the state board of health finds:
- (i) Due to compelling factors, the public water system is unable to comply with the requirement;
- (ii) The schedule of compliance for a variance or exemption will result in the public water system completing the required actions within the stated time frame; and
- (iii) The granting of the variance, exemption, or waiver will not result in an unreasonable risk to the health of consumers served by the public water system.
- (d) The EPA shall review any variance or exemption granted by the state board of health for concurrence, revocation, or revision provided under sections 1415 and 1416 of P.L. 93-523.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–060, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99–339. 89–21–020 (Order 336), § 248–54–055, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–055, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83–19–002 (Order 266), § 248–54–055, filed 9/8/83.]

PART 1. PLANNING AND ENGINEERING DOCUMENTS

WAC 246-290-100 Water system plan. (1) The purpose of this section is to establish a uniform process for public water systems to:

- (a) Identify present and future needs;
- (b) Set forth means for meeting those needs; and
- (c) Do so in a manner consistent with other relevant plans and local, state, and federal laws.
- (2) The following categories of public water systems shall develop a water system plan for review and approval by the department:
- (a) All public water systems having one thousand or more services;

- (b) Public water systems located in areas utilizing the Public Water System Coordination Act of 1977, chapter 70.116 RCW and chapter 248-56 WAC;
- (c) Any public water system experiencing problems related to planning, operation, and/or management as determined by the department; and
- (d) Any new public water system as determined by the department.
- (3) The department shall work with the purveyor and other parties to establish the level of detail for a water system plan. In general, the scope and detail of the plan will be related to size and complexity of the water system. Project reports may be combined with a water system plan.
- (4) The water system plan shall address the following elements as a minimum for a period of at least ten years into the future. A department guideline titled *Planning Handbook* is available to assist the utility in adequately addressing these elements:
 - (a) Basic water system planning data,
 - (b) Existing system analysis,
 - (c) Planned improvements,
 - (d) Financial program,
 - (e) Relationship and compatibility with other plans,
 - (f) Supporting maps,
 - (g) Operations program,
 - (h) State Environmental Policy Act, and
- (i) Watershed control when applicable (see WAC 248-54-225).
- (5) Department approval of a water system plan shall be in effect for five years from the date of written approval unless:
- (a) Major system improvements are contemplated which are not addressed in the plan,
- (b) Changes occur in the basic planning data affecting improvements identified, and
 - (c) The department requests an updated plan.
- (6) The purveyor shall update the plan and submit it for approval every five years. However, if only minor alterations to an existing plan are considered necessary, the purveyor may submit evidence supporting this conclusion in a letter to the department for approval.
- (7) Project reports and construction documents submitted for approval per WAC 248-54-086 and 248-54-096 by purveyors required to have a water system plan, will not be considered for approval unless there is a current approved water system plan and the plan adequately addresses the project.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–065, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83–19–002 (Order 266), § 248–54–065, filed 9/8/83.]

WAC 246-290-110 Project report. (1) The purpose of this section is to assure the following factors are taken into account for specific projects prior to construction:

- (a) Engineering concepts;
- (b) Design criteria;
- (c) Planning;
- (d) Source protection;

- (e) Water quality;
- (f) Local requirements such as fire flow; and
- (g) Other necessary department-determined considerations.

The project report shall document the reasons for carrying out the project and WAC 248-54-096 shall identify how the project will be constructed.

- (2) The purveyor shall submit project reports to the department for written approval prior to installation of any new water system, water system extension, or improvement with the following exceptions:
 - (a) Installation of valves, fittings, and meters;
- (b) Installation of hydrants under WAC 248-54-135(3);
- (c) Repair of a system component or replacement with a similar component;
- (d) Maintenance or painting of surfaces not contacting potable water; and
- (e) Distribution mains if approved standard construction specifications are documented in the water system plan approved by the department.
- (3) Project reports shall be consistent with the standards identified under WAC 248-54-105 and shall include, at a minimum, the following (information contained in a current approved water system plan or current project report need not be duplicated in the new project report. Any planning information in a project report shall be project specific.):
- (a) Project description. Identify what the project is intended to achieve, design considerations, approach, etc.;
- (b) Planning. If the system has an approved water system plan, show the project's relationship to the plan. If a water system plan is not required, include:
- (i) General project background with population and water demand forecasts;
- (ii) Relationship between the project and other system components;
 - (iii) Project schedule;
 - (iv) Management program; and
- (v) How the project will impact neighboring water systems.
- (c) Alternatives. Describe options, their impacts, and justify the selected alternative;
- (d) Legal considerations. Identify legal aspects such as ownership, right-of-way, sanitary control area, and restrictive covenants. Include discussion of the project's relationship with the boundary review board and the utility and transportation commission;
- (e) Engineering calculations. Describe how the project complies with the design considerations. Include the hydraulic analysis, sizing justification, and other relevant technical considerations necessary to support the project;
- (f) Management. If the system has an approved management program, refer to that document. If not, describe:
- (i) System ownership and management responsibilities;
 - (ii) Long-term management considerations;
 - (iii) How the project will be operated; and
 - (iv) How the project will be maintained over time.

- (g) Implementation. Identify the schedule for completion of the project and implementation strategies, if any. Project phasing should also be discussed;
- (h) State Environmental Policy Act (SEPA). Include an environmental impact statement, determination of nonsignificance, or justify why SEPA does not apply to the project. Refer to chapter 248–06 WAC and the "DSHS Drinking Water SEPA Guide";
- (i) Source development information. If the project involves source, refer to requirements per WAC 248-54-097; and
- (j) Type of treatment. If the project involves treatment, refer to WAC 248-54-155.
- (k) The information required in this subsection shall be included in a letter addendum to the workbook for **Group B** water systems.
- (4) Approval of project documents shall be in effect for two years unless the department determines a need to withdraw the approval. An extension of the approval may be obtained by submitting a status report and a written schedule for completion. Extensions may be subject to additional terms and conditions imposed by the department.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-290-110, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99-339. 89-21-020 (Order 336), § 248-54-086, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 34.04.045. 88-05-057 (Order 307), § 248-54-086, filed 2/17/88.]

- WAC 246-290-120 Construction documents. (1) The purpose of this section is to assure detailed plans, specifications, drawings, and other documents are adequately prepared for specific projects. These documents shall identify how specific projects will be constructed while WAC 248-54-086 documents the reasons for carrying out the project.
- (2) Construction documents shall be submitted to the department for written approval prior to installation of any new water system, or water system extension or improvement with the following exceptions:
 - (a) Installation of valves, fittings, and meters;
 - (b) Installation of hydrants per WAC 248-54-135(3);
- (c) Repair of a system component or replacement with a similar component;
- (d) Maintenance or painting of surfaces not contacting potable water;
- (e) Distribution mains if the approved water system plan documents standard construction specifications approved by the department.
- (3) Construction documents shall be consistent with the standards identified in WAC 248-54-105 and shall include, at a minimum, the following:
- (a) Drawings. Include detailed drawings of each project component;
- (b) Material specifications. List detailed material specifications for each project component;
- (c) Construction specifications. List detailed construction specifications and assembly techniques for carrying out the project;
- (d) Testing. Identify testing criteria and procedures for each applicable portion of the project;

- (e) Disinfection. Identify specific disinfection procedures which must conform with American water works association standards or other standards acceptable by the department;
- (f) Inspection. Identify provisions for inspection of the installation of each project component. See WAC 248–54–035 for construction reporting requirements; and
- (g) Change orders. All changes except for minor field revisions must be submitted to and approved by the department in writing. Identify who will be responsible for obtaining departmental approval and how change orders will be reported to the department.
- (4) Approval of construction documents shall be in effect for two years unless the department determines a need to withdraw the approval. An extension of the approval may be obtained by submitting a status report and a written schedule for completion. Extensions may be subject to additional terms and conditions imposed by the department.
- (5) A department guideline titled *Planning Handbook* is available to assist the utility in meeting the requirements of this section.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-290-120, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.04.045. 88-05-057 (Order 307), § 248-54-096, filed 2/17/88.]

- WAC 246-290-130 Source approval. (1) No new, previously unapproved sources, or modification of existing sources shall be used as a public water supply without department approval. A party seeking approval shall provide the department the following:
- (a) A copy of the water right permit, if required, obtained from the department of ecology for the source, quantity, type, and place of use;
- (b) A hydrogeologic assessment of the proposed source along with a general description of the watershed, spring, and/or aquifer recharge area affecting the quantity or quality of flow. Seasonal variation shall also be included;
- (c) For unfiltered surface water, the watershed control program identified under WAC 248-54-225;
- (d) Upstream water uses affecting either water quality or quantity;
 - (e) A map showing the project location and vicinity;
- (f) A map depicting topography, distances to the surface water intake, well or spring from existing property lines, buildings, potential sources of contamination, ditches, drainage patterns, and any other natural or man-made features affecting the quality or quantity of water;
- (g) The dimensions and location of sanitary control area as set forth under WAC 248-54-125;
- (h) Copies of the recorded legal documents for the sanitary control area necessary to protect the source of supply;
- (i) A copy of the on-site inspection approval made by the department or local health department representative;
 - (j) A copy of the water well report;
 - (k) Necessary construction documents;

- (1) Well source development data to establish the capacity of the source shall include static water level, yield, the amount of drawdown, recovery rate, and duration of pumping. Interference between existing sources and the source being tested must also be shown. To determine whether the well and aquifer are capable of supplying water at the rate desired and to provide information necessary to determine the proper pump settings in the well, the source shall be pump tested at no less than the maximum design rate. A department guideline on pump testing is available to assist purveyors;
- (m) The results of an initial analysis of the raw water quality, including as a minimum a bacteriological and complete inorganic chemical and physical analysis from each source. When source water quality is subject to variation, additional monitoring may be required by the department to define the range of variation. If the source being approved is for a **community** system, a radionuclide analysis shall also be required;
- (n) Detailed information regarding all aspects of water quality addressed under WAC 248-54-175. If treatment is planned, refer to WAC 248-54-155(2); and
- (o) Other information as may be required by the department. Before initiating source development or modification, the purveyor should contact the department in order to identify any such additional information.
- (2) The department shall issue a written approval when:
 - (a) Necessary information is submitted; and
- (b) The developed source provides water complying with chapter 248-54 WAC.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–130, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99–339. 89–21–020 (Order 336), § 248–54–097, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–097, filed 2/17/88.]

- WAC 246-290-140 Existing system approval. (1) When applying for approval, purveyors of existing public water systems without approved construction documents shall provide department-determined information.
- (2) Information provided shall be consistent with chapter 248-54 WAC.
- (3) Purveyors shall contact the department to obtain a list of specific requirements.
- (4) After receipt of the required data, the department shall review the information and either:
 - (a) Approve the as-built construction documents; or
- (b) Indicate what additional actions the purveyor needs to complete before approval is granted.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-290-140, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99-339. 89-21-020 (Order 336), § 248-54-098, filed 10/10/89, effective 11/10/89.]

PART 2. DESIGN OF PUBLIC WATER SYSTEMS

WAC 246-290-200 Design standards. (1) Good engineering practices shall be used in the design of all public water systems, such as those set out in:

- (a) The most recently published edition of Recommended Standards for Water Works, A Committee Report of the Great Lakes Upper Mississippi River Board of State Sanitary Engineers;
- (b) Department guideline titled Sizing Guidelines for Public Water Supplies;
- (c) Standard specifications of the American Public Works Association;
- (d) Standard specifications of the American Water Works Association; and
- (e) Design criteria, such as contained in current college texts and professional journal articles, acceptable to the department; and
- (f) WAC 173-160 Minimum Standards for Construction and Maintenance of Water Wells.
- (2) In addition, all new or expanding public water systems shall use the following design factors:
 - (a) Historical water use,
 - (b) Community versus recreational uses of water,
 - (c) Local conditions and/or regulations,
 - (d) Community expectations,
- (e) Public Water System Coordination Act considerations where appropriate,
 - (f) Risks from potential disasters, and
- (g) Other requirements as determined by the department.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–200, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–105, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83–19–002 (Order 266), § 248–54–105, filed 9/8/83.]

- WAC 246-290-210 Source protection. Public drinking water shall be obtained from the highest quality source feasible. Existing and proposed sources of supply shall conform to the water quality standards established in WAC 248-54-175.
- (1) For wells and springs, the minimum sanitary control area shall have a radius of one hundred feet (thirty meters) and two hundred feet (sixty meters) respectively, unless engineering justification supports a smaller area. The justification must address geological and hydrological data, well construction details, and other relevant factors needed to assure adequate sanitary control. The department may require a larger sanitary control area than is set forth above if geological and hydrological data supports such a decision. It shall be the purveyor's responsibility to obtain the protection needed.

Within the control area, no source of contamination may be constructed, stored, disposed of, or applied without the permission of the department and the purveyor.

(2) The control area for new sources must be owned by the purveyor in fee simple, or the purveyor must have the right to exercise complete sanitary control of the land through other legal provisions.

A purveyor, owning all or part of the sanitary control area in fee simple or having possession and control, shall send to the department copies of legal documentation, such as a duly recorded declaration of covenant, restricting the use of the land. This document shall state no source of contamination may be constructed, stored,

disposed of, or applied without the permission of the department and the purveyor, and if any change in ownership of the system or sanitary control area is considered, all affected parties shall be informed of these requirements.

Where portions of the control area are in the possession and control of another, the purveyor must obtain a duly recorded restrictive covenant which shall run with the land, restricting the use of said land in accordance with these rules and provide the department with copies of the appropriate documentation.

- (3) Adequate watershed control, consistent with treatment provided, shall be demonstrated and documented for all surface water sources per WAC 248-54-225. A section in the department guideline titled *Planning Handbook* deals with watershed control and is available to assist utilities in this regard.
- (4) Where, in the opinion of the department a potential risk exists to the water quality of a source, additional controls or monitoring may be required.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–210, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–125, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83–19–002 (Order 266), § 248–54–125, filed 9/8/83.]

- WAC 246-290-220 Lead in materials. (1) Any pipe, pipe fittings, solder, or flux used in the installation or repair of a public water system shall be lead-free. This prohibition shall not apply to leaded joints necessary for the repair of cast iron pipes.
- (2) Within the context of this section, lead-free shall mean:
- (a) No more than eight percent lead in pipes and pipe fittings, and
- (b) No more than two-tenths of one percent lead in solder and flux.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-290-220, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.04.045. 88-05-057 (Order 307), § 248-54-131, filed 2/17/88.]

- WAC 246-290-230 Distribution systems. (1) All new distribution reservoirs shall have suitable watertight roofs or covers preventing entry by birds, animals, insects, and dust and shall include appropriate provisions to safeguard against trespass, vandalism, and sabotage. Existing uncovered distribution reservoirs shall comply with the provisions of WAC 248-54-245.
- (2) The purveyor shall size and evaluate the distribution system using a hydraulic analysis acceptable to the department.
- (3) The minimum diameter of all distribution mains shall be six inches (150 mm) unless justified by hydraulic analysis. Systems designed to provide fire flows shall have a minimum distribution main size of six inches (150 mm). Installation of standard fire hydrants shall not be allowed on mains less than six inches (150 mm) in diameter.
- (4) New public water systems or additions to existing systems shall provide a design quantity of water at a positive pressure of at least 30 psi (200 kPa) under

maximum instantaneous demand flow conditions measured at any customer's water meter or at the property line if no meter exists.

- (5) If fire flow is to be provided, the distribution system shall be designed to provide the required fire flow at a pressure of at least 20 psi during MID conditions.
- (6) Booster pumps needed for individual services shall be subject to review and approval by the department. Installation shall be made under the supervision of the purveyor to assure cross—connection control requirements are met.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–230, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–135, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83–19–002 (Order 266), § 248–54–135, filed 9/8/83.]

WAC 246-290-240 Disinfection of facilities. No portion of a public water system containing potable water shall be put into service, nor shall service be resumed, until the facility has been effectively disinfected. The procedure used for disinfection shall conform to the American Water Works Association standards or other standards acceptable to the department. In cases of new construction, drinking water shall not be furnished to the consumer until satisfactory bacteriological samples have been analyzed by a laboratory certified by the state.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–240, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–145, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83–19–002 (Order 266), § 248–54–145, filed 9/8/83.]

- WAC 246-290-250 Treatment design. (1) Finished water quality from existing and proposed sources of supply shall conform to the minimum water quality standards established in WAC 248-54-175.
- (2) Predesign studies shall be required for proposed surface water supplies and those ground water supplies requiring treatment. The goal of the predesign study shall be to establish the most acceptable method to produce satisfactory finished water quality and shall be done in conjunction with a project report as per WAC 248-54-086.
- (3) The minimum level of treatment for all public water supplies shall be continuous and effective disinfection. The requirement for disinfection may be waived for public water systems with:
 - (a) Well sources:
 - (i) Having a satisfactory bacteriological history, and
- (ii) Drawing from a protected aquifer as determined by the department.
 - (b) Spring sources:
 - (i) Having a satisfactory bacteriological history;
- (ii) Having evidence to demonstrate, to the satisfaction of the department, the spring originates in a stratum not subject to contamination; and
- (iii) Where the water is collected by a method precluding contamination.
- (4) Treatment for surface water supplies shall be coagulation, flocculation, filtration, and disinfection. In certain cases, alternative treatment designs followed by

disinfection may be acceptable to the department, provided there is adequate engineering justification.

- (5) Disinfection as the sole means of treatment for existing surface water supplies may be acceptable to the department provided the purveyor can demonstrate adequate:
 - (a) Watershed control per WAC 248-54-225,
 - (b) Raw and finished water quality, and
 - (c) Water system design and operation.
- (6) Disinfection methods, other than chlorination, i.e., ozonation, ultraviolet radiation, iodination may be approved by the department with appropriate engineering justification.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–250, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–155, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83–19–002 (Order 266), § 248–54–155, filed 9/8/83.]

PART 3. WATER QUALITY

WAC 246-290-300 Monitoring requirements. (1) General.

- (a) The purveyor shall be responsible for satisfying all requirements of this section. The monitoring requirements in this section are minimums. Additional monitoring may be required by the department:
 - (i) When system water quality exceeds an MCL; or
 - (ii) When source contamination is suspected; or
- (iii) Under other circumstances as identified in a departmental order.
- (b) Samples required under this section shall be collected, transported, and analyzed according to methods approved by the department. The analyses shall be done by the state public health laboratory or by any other laboratory certified by the department for the analyses to be performed, except turbidity as required under WAC 248-54-165(4) may be tested by water utility or health department personnel.
- (c) When one public water system receives water from another public water system, the receiving system is only required to take bacteriological samples per WAC 248–54–165(2) and trihalomethane samples as appropriate per WAC 248–54–165(5).

Subject to revision as appropriate, the department may reduce the monitoring requirement of the receiving system provided the receiving system:

- (i) Has had a good water quality history;
- (ii) Is operated in a satisfactory manner consistent with these regulations;
- (iii) Is included in the supplying system's regular monitoring schedule; and
- (iv) Is included in the service and population totals for the supplying system.

Periodic reviews of the system's sampling record may be made to determine if continued reduction is appropriate.

- (d) Special purpose samples, such as check samples or samples taken to determine if disinfection following pipe repair has been sufficient, shall not count toward fulfillment of these monitoring requirements.
- (e) All monitoring requirements in subsections (2) through (8) of this section apply equally to systems serving resident or nonresident populations unless otherwise stated.
 - (2) Bacteriological.
- (a) Drinking water samples shall be collected for bacteriological analysis from representative points in the distribution system at regular time intervals.
- (b) The frequency for monitoring drinking water shall be determined according to the following:
- (i) For **community** systems, the minimum number of routine samples to be analyzed is shown in Table 2;
- (ii) For NTNC and TNC systems, the minimum number of routine samples to be analyzed is shown in Table 3. In the case where an activity lasts for one week or less, sampling frequency shall be as directed by the department;
- (iii) For Group A water systems serving both a resident and a nonresident population, the minimum number of routine samples to be analyzed may vary from month to month. The number of samples required each month will be the higher number of samples from Table 2 and Table 3; and
- (iv) For Group B water systems, the minimum number of routine samples is one every twelve months.
- (c) When disinfection is practiced, the purveyor shall collect untreated (raw) water samples from each source for bacteriological analysis of total coliform in addition to the number of treated samples required. The frequency of monitoring untreated water shall be determined according to the following:
- (i) For protected ground water sources, one sample every three months shall be analyzed;
- (ii) For unprotected ground water sources, the number of samples analyzed shall be twenty percent of the distribution samples required each month, and in no case less than one every three months;
- (iii) For surface sources with treatment including coagulation, filtration, and disinfection or other treatment process, the number of samples analyzed shall be ten percent of the distribution samples required each month, and in no case less than one every three months; and
- (iv) For surface sources without coagulation and filtration treatment, the number of samples analyzed shall be twenty percent of the distribution samples required each month, and in no case less than one every three months.

Number of Residents* Served	Minimum No. of Samples Per Month	Number of Residents Served	Minimum No. of Samples Per Month
T (1 051	1 4 4	37,001 - 41,000	45
Less than 251	1**	41,001 - 46,000	50
251 - 1,000	1	46,001 - 50,000	55
1,001 - 2,500	2	50,001 - 54,000	60
2,501 - 3,300	3	54,001 - 59,000	65
3,301 - 4,100	4	59,001 - 64,000	70 7.5
4,101 - 4,900	5	64,001 - 70,000	75
4,901 - 5,800	6	70,001 - 76,000	80
5,801 - 6,700	7	76,001 - 83,000	85
6,701 - 7,600	8	83,001 - 90,000	90
7,601 - 8,500	9	90,001 - 96,000	95
8,501 - 9,400	10	96,001 - 111,000	100
9,401 - 10,300	11	111,001 - 130,000	110
10,301 - 11,100	12	130,001 - 160,000	120
11,101 - 12,000	13	160,001 - 190,000	130
12,001 - 12,900	14	190,001 - 220,000	140
12,901 - 13,700	15	220,001 - 250,000	150
13,701 - 14,600	16	250,001 - 290,000	160
14,601 - 15,500	17	290,001 - 320,000	170
15,501 - 16,300	18	320,001 - 360,000	180
16,301 - 17,200	19	360,001 - 410,000	190
17,201 - 18,100	20	410,001 - 450,000	200
18,101 - 18,900	21	450,001 - 500,000	210
18,901 - 19,800	22	500,001 - 550,000	220
19,801 - 20,700	23	550,001 - 600,000	230
20,701 - 21,500	24	600,001 - 660,000	240
21,501 - 22,300	25	660,001 - 720,000	250
22,301 - 23,200	26	720,001 - 780,000	260
23,201 - 24,000	27	780,001 - 840,000	270
24,001 - 24,900	28	840,001 - 910,000	280
24,901 - 25,000	29	910,001 - 970,000	290
25,001 - 28,000	30	970,001 - 1,050,000	300
28,001 - 33,000	35	1,050,001 - 1,140,000	310
33,001 - 37,000	40		

^{*}Does not include population of utilities wholesaled to, except as provided under WAC 248-54-165 (1)(c)

TABLE 3

MINIMUM ROUTINE BACTERIOLOGICAL SAMPLING
REQUIREMENTS FOR NTNC AND TNC SYSTEMS BASED ON
NONRESIDENT POPULATIONS

Maximum Day Population Served in Any One Month	Minimum Number Samples That Month
Less than 25	1 every 12 months
25 – 299	1 every 3 months
300 – 999	1*
1,000 - 2,499	2
2,500 - 3,499	3
3,500 - 4,999	4
5,000 - 9,999	6

10,000 - 14,999	8
15,000 - 19,999	10
20,000 - 29,999	12
30,000 - 39,999	14
40,000 - 49,999	16
50,000 - 74,999	20
75,000 - 99,999	25
100,000 or more	30

^{**}May be reduced by the department to no less than one every three months for systems with protected ground water sources.

- (a) The complete inorganic chemical and physical analysis consists of the primary and secondary chemical and physical standards.
- (i) Primary chemical and physical standards Arsenic, barium, cadmium, chromium, fluoride, lead, mercury, nitrate (as N), selenium, silver, sodium, and turbidity.
- (ii) Secondary chemical and physical standards Chloride, color, copper, hardness, iron, manganese, specific conductivity, sulfate*, total dissolved solids*, and zinc.

*Required only when specific conductivity exceeds seven hundred micromhos/centimeter.

- (b) Samples taken for inorganic chemical analyses shall be collected at the source prior to any treatment.
- (c) The frequency for monitoring shall be according to the following:
- (i) Community systems shall have one complete analysis from each surface water source every twelve months.
- (ii) Community systems shall have one complete analysis from each ground water source or well field every thirty-six months.
- (iii) NTNC, TNC, and Group B systems shall have one initial complete analysis from each source or well field. The minimum requirement for the initial complete analysis may be waived or reduced by the department if available information shows to the satisfaction of the department that the aquifer provides water of satisfactory inorganic chemical quality.
- (iv) After the initial complete analysis, NTNC, TNC, and Group B systems shall have one nitrate sample analyzed from each source or well field every thirty—six months.
- (d) When treatment is provided for one or more inorganic chemical or physical contaminants, samples shall be taken for the specific contaminant or contaminants before and after treatment. The frequency shall be determined by the department.
 - (4) Turbidity.
- (a) Group A water systems with surface water sources shall monitor turbidity at least once a day.
- (b) Turbidity shall be monitored at or before the entry point to the distribution system and where needed for treatment process control.
- (c) The monitoring requirements for Group B water systems shall be determined by the department.
- (d) Turbidimeters shall be designed to meet the criteria listed under standard methods and shall be properly operated, maintained, and calibrated at all times, based on the manufacturer's recommendations.
 - (5) Trihalomethanes.
- (a) Community systems serving a population of 10,000 or more and providing water treated with chlorine or other halogenated disinfectant shall monitor as follows:
- (i) Ground water sources. The purveyor shall collect one sample from each treated spring, well, or well field every twelve months. This sample shall be taken at the source before treatment or at the extreme end of the distribution system. The sample shall be analyzed for maximum total trihalomethane potential (MTTP); or

- (ii) Surface water sources. The purveyor shall collect four samples per treated source every three months. The samples shall be taken within a twenty-four-hour period. One of the samples collected shall be taken from the extreme end of the distribution system and three samples collected shall be taken from representative locations in the distribution system. The samples shall be analyzed for total trihalomethanes (TTHM), the sum of trichloromethane, bromodichloromethane, dibromochloromethane, and tribromomethane. After one year of monitoring, the department may reduce the monitoring frequency to one sample every three months per treatment plant if the TTHM levels are less than 0.10 mg/L. The sample shall be taken at the extreme end of the distribution system; or
- (iii) Purchased surface water sources. The purveyor shall collect one water sample per each purchased surface source every three months. The sample shall be taken at the extreme end of the distribution system and analyzed for TTHM.
- (b) Community systems serving a population less than ten thousand and providing surface water treated with chlorine or other halogenated disinfectant shall monitor for TTHM. The purveyor shall collect one water sample per treated source every three months for one year. The sample shall be taken at the extreme end of the distribution system and analyzed for TTHM. After the first year, surface water sources shall be monitored every thirty—six months.
- (c) Community systems serving less than ten thousand people that purchase surface water treated with chlorine or other halogenated disinfectant or add a halogenated disinfectant after purchasing, shall monitor for TTHM. The purveyor shall collect one water sample every three months at the extreme end of the distribution system or at a location acceptable to the department. The sample shall be analyzed for TTHM. After the first year, monitoring shall be every thirty-six months.
 - (6) Pesticides.

Community systems with surface water sources shall monitor for pesticides for which MCLs are established every thirty-six months. The water sample shall be collected during the time of year designated by the department as the time when pesticide contamination is most likely to occur.

- (7) Radionuclides.
- (a) Monitoring requirements for gross alpha particle activity, radium-226 and radium-228 are:
- (i) Community systems shall monitor once every forty-eight months. Compliance shall be based on the analysis of an annual composite of four consecutive quarterly samples or the average of the analyses of four samples obtained at quarterly intervals.
- (ii) Analysis for radium-226 and radium-228 may be omitted if the gross alpha particle activity is less than five pCi/L.
- (iii) If the results of the initial analysis are less than half of the established MCL, the department may allow compliance with the monitoring requirements to be based on analysis of a single sample collected every forty-eight months.

- (b) Monitoring requirements for man-made radioactivity:
- (i) Community systems using surface water sources and serving more than one hundred thousand persons and other water systems designated by the department shall monitor for man-made radioactivity (beta particle and photon) every forty-eight months. Compliance shall be based on the analysis of a composite of four consecutive quarterly samples or the analysis of four quarterly samples.
- (ii) Any water system, as directed by the department, downstream from a nuclear facility shall monitor once every three months for gross beta and iodine-131, and monitor once every twelve months for strontium-90 and tritium. The department may allow the substitution of environmental surveillance data taken in conjunction with a nuclear facility for direct monitoring of manmade radioactivity after a determination that such data is applicable to a particular public water system.
 - (8) Other substances.

On the basis of public health concerns, monitoring of additional substances may be required by the department.

TABLE 4

MONITORING LOCATION

Sample Type	Sample Location
Bacteriological	From representative points in distribution system.
Complete Inorganic Chemical and Physical	From a sample point as close to the source as possible.
Nitrate	From a sample point as close to the source as possible.
Turbidity - Surface Water	From a location at or before the entry point to the distribution system.
Trihalomethanes - Surface Water	From representative points in the distribution system.
- Ground Water	From the source prior to treatment.
Pesticides - Surface Water	From the source.
Radionuclides	From the source.
Other Substances	As directed by the department.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–300, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99–339. 89–21–020 (Order 336), § 248–54–165, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–165, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83–19–002 (Order 266), § 248–54–165, filed 9/8/83.]

WAC 246-290-310 Maximum contaminant levels (MCLs). (1) The purveyor shall be responsible for complying with the standards of water quality identified in this section.

If any substance exceeds its maximum contaminant level (MCL), the purveyor shall take follow-up action as outlined under WAC 248-54-185.

- (2) In enforcing the standards set out in this section, the department shall seek to enforce compliance with the primary standards as its first priority.
 - (3) Bacteriological.

- (a) Standards under subsection (3) of this section shall be considered primary standards.
- (b) If any coliform bacteria are present in any sample, follow-up action as described under WAC 248-54-185(2) shall be taken.
 - (c) The MCL for coliform bacteria is as follows:
- (i) When the membrane filter test is used, the number of coliform bacteria shall not be greater than:
- (A) One per one hundred milliliters as the average of all samples tested each month; or
- (B) Four per one hundred milliliters in two or more samples when less than twenty samples are tested each month; or
- (C) Four per one hundred milliliters in more than five percent of the samples when twenty or more samples are tested each month.
- (ii) When the five-tube MPN method is used, coliform bacteria shall not be present in:
- (A) More than ten percent of the tubes tested each month; or
- (B) Three or more tubes in two or more samples when less than twenty samples are tested each month; or
- (C) Three or more tubes in more than five percent of the samples when twenty or more samples are tested each month.
- (iii) The department may allow systems required to take less than four samples each month to base compliance with this section on the samples taken during the three-month period consisting of the month in question and the previous two months.
- (iv) Special purpose samples, such as those taken to determine if disinfection following pipe repair or replacement has been sufficient, or check samples shall not be used to determine compliance with the MCL.
- (v) Samples with unsuitable test results, i.e., confluent growth, TNTC (too numerous to count), excess debris, etc., will not qualify as routine samples and will not count toward fulfillment of the monitoring requirement.
 - (4) Inorganic chemical and physical.

The primary and secondary MCLs are as listed in Table 5 and 6:

TABLE 5

INORGANIC CHEMICAL CHARACTERISTICS

Substance	Primary MCLs (mg/L
Arsenic (As)	0.05
Barium (Ba)	1.0
Cadmium (Cd)	0.01
Chromium (Cr)	0.05
Fluoride (F)	4.0
Lead (Pb)	0.05
Mercury (Hg)	0.002
Nitrate (as N)	10.0
Selenium (Se)	0.01
Silver (Ag)	0.05
Sodium (Na)	*
Substance	Secondary
•	MCLs (mg/L)
Chloride (Cl)	250.0
Copper (Cu)	1.0
Fluoride (F)	2.0

Substance	Secondary MCLs (mg/L)
Iron (Fe)	0.3
Manganese (Mn)	0.05
Sulfate (SO ₄)	250.0
Zinc (Zn)	5.0

Note: Although there has not been an MCL established for sodium, there is enough public health significance connected with sodium levels to require inclusion in inorganic chemical and physical monitoring.

TABLE 6

PHYSICAL CHARACTERISTICS

Substance	Primary MCL		
Turbidity	1 NTU		
Substance	Secondary MCLs		
Color	15 Color Units		
Hardness	None established		
Specific Conductivity	700 umhos/cm		
Total Dissolved Solids (TDS)	500 mg/L		

- (5) Turbidity.
- (a) Standards under subsection (5) of this section shall be considered primary standards.
 - (b) The MCLs for turbidity are as follows:
- (i) One NTU, based on a monthly average of the maximum daily turbidity, where the maximum daily turbidity is defined as:
- (A) The average of the highest two hourly readings over a twenty-four hour period when continuous monitoring is used; or
- (B) The average of the daily grab samples taken within one hour when daily monitoring is used.

The limit may be increased to five NTUs if the purveyor can show the source is within a controlled watershed and meets all the requirements under WAC 248-54-125 and 248-54-225.

- (ii) Five NTUs based on an average of the maximum daily turbidity for two consecutive days.
 - (6) Trihalomethanes.
- (a) Standards under subsection (6) of this section shall be considered primary standards.
- (b) The MCL for total trihalomethanes (TTHM) is 0.10 mg/L. The concentrations of each of the trihalomethane compounds (trichloromethane, dibromochloromethane, bromodichloromethane, and tribromomethane) are added together to determine the TTHM level.
- (c) There is no MCL for maximum total trihalomethane potential (MTTP). If the MTTP value exceeds 0.10 mg/L, the purveyor shall follow up as outlined under WAC 248-54-185(5).
 - (7) Pesticides.
- (a) Standards under subsection (7) of this section shall be considered primary standards.

- (b) The MCLs for pesticides are as follows:
- (i) Chlorinated hydrocarbons:

Endrin	0.0002 mg/L
Lindane	0.004 mg/L
Methoxychlor	0.1 mg/L
Toxaphene	0.005 mg/L

(ii) Chlorophenoxys:

2, 4–D		0.1 r	ng/L
2, 4, 5-TP	Silvex	0.01	mg/L

- (8) Radionuclides.
- (a) Standards under subsection (8) of this section shall be considered primary standards.
- (b) The MCLs for radium-226, radium-228, and gross alpha particle radioactivity are as follows:

Radium-226	3 p	Ci/L
Combined Radium-226 and Radium-228	5 p	Ci/L
Gross alpha particle activity (excluding uranium)	15 p	Ci/L

(c) The MCL for beta particle and photon radioactivity from man-made radionuclides is that the average annual concentration shall not produce an annual dose equivalent to the total body or any internal organ greater than four millirem/year.

Compliance with the four millirem/year dose limitation may be assumed if the average annual concentration for gross beta activity, tritium, and strontium—90 are less than 50 pCi/L, 20,000 pCi/L, and 8 pCi/L respectively, provided that if both radionuclides are present, the sum of their annual dose equivalents to bone marrow shall not exceed four millirem/year.

(9) The maximum levels allowable for any additional substances monitored shall be determined by the state board of health.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–310, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99–339. 89–21–020 (Order 336), § 248–54–175, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–175, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83–19–002 (Order 266), § 248–54–175, filed 9/8/83.]

WAC 246-290-320 Follow-up action. (1) General.

- (a) If water quality exceeds any MCLs listed in WAC 248-54-175, the purveyor shall notify the department and take follow-up action as described in this section.
- (b) When a primary MCL violation occurs, the purveyor shall:
 - (i) Notify the department within forty-eight hours;
- (ii) Notify the public according to the procedures outlined under WAC 248-54-187;
 - (iii) Determine the cause of the contamination; and
- (iv) Take corrective action as required by the department.
- (c) When a secondary MCL violation occurs, the purveyor shall notify the department and take corrective action as directed by the department.

- (2) Bacteriological.
- (a) When coliform bacteria are present in any sample analyzed by the membrane filter method, the purveyor shall take action as follows:
- (i) When the sample result is one through four per one hundred milliliters, the sample is unsatisfactory and an additional drinking water sample shall be taken to confirm the presence of coliform bacteria; or
- (ii) When the sample result is greater than four per one hundred milliliters, the sample is unsatisfactory and nonconforming. The purveyor shall take action to determine and correct the cause of the contamination. Daily check samples shall continue to be collected until at least two consecutive daily check samples show less than one coliform per one hundred milliliters.
- (b) When coliform bacteria are present in any sample analyzed by the five-tube MPN method, the purveyor shall take action as follows:
- (i) When the sample result is one or two tubes positive, the sample is unsatisfactory and an additional drinking water sample shall be taken to confirm the presence of contamination; or
- (ii) When the sample result is three or more tubes positive, the sample is unsatisfactory and nonconforming. The purveyor shall take action to determine and correct the cause of the contamination. Daily check samples shall continue to be collected until at least two consecutive daily check samples show no coliform bacteria are present.
- (c) All additional samples required by this section shall be collected from the same location where the unsatisfactory or unsuitable sample was taken, except as specified by the department.
- (d) All additional samples shall be submitted for analyses as soon as possible after the unsatisfactory or unsuitable results are known.
- (e) When the presence of coliform bacteria in water has been confirmed by check samples, the purveyor shall notify the department within forty-eight hours.
- (f) When the sample result is marked unsuitable, an additional drinking water sample shall then be submitted for analysis for each unsuitable result immediately upon notification of the unsuitable result. The additional sample shall be analyzed by the MPN testing method.
- (g) The location where the daily check samples were taken to fulfill the requirements of this section shall not be eliminated from future sampling without the department's approval.
- (3) Inorganic chemical and physical. When an initial analysis of any substance exceeds the MCL, the purveyor shall take the following action:
- (a) For nitrate, immediately take one additional sample from the same sampling point. If the average of the two samples exceeds the MCL, a violation is confirmed;
- (b) For all other inorganic chemical and physical substances, within thirty days take three additional samples from the same sample point. If the average of all four samples exceeds the MCL, a violation is confirmed.
- (4) Turbidity. When the turbidity exceeds the maximum allowable limit identified under WAC 248-54-175

- for longer than one hour monitored continuously, the purveyor shall report to the department within forty-eight hours. When the results of a manual turbidity analysis exceeds the maximum allowable limit, another sample shall be collected within one hour. When the repeat sample confirms the maximum allowable limit has been exceeded, the purveyor shall notify the department.
- (5) Trihalomethanes. When the average of all samples taken during any twelve-month period exceeds the MCL for total trihalomethanes, the violation is confirmed and the purveyor shall take corrective action as required by the department. If the maximum trihalomethane potential result is equal to or greater than 0.10 mg/L and the result is confirmed by a check sample, the system shall monitor according to WAC 248-54-165(5) for one year or more.
- (6) Follow-up action shall be determined by the department when the MCL for any additional substance is exceeded.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–320, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99–339. 89–21–020 (Order 336), § 248–54–185, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–185, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83–19–002 (Order 266), § 248–54–185, filed 9/8/83.]

- WAC 246-290-330 Public notification. (1) Responsibility. The purveyor of a Group A water system shall notify the water system users and the department when the following violations occur within the Group A system:
- (a) A primary MCL violation under WAC 248-54-175;
 - (b) Failure to comply with a:
 - (i) Prescribed treatment technique;
- (ii) Monitoring requirement under WAC 248-54-165;
 - (iii) Testing procedure.
 - (c) Operating under a variance or exemption; and
 - (d) Failure to meet a variance or exemption schedule.

The department may also require the purveyor of a Group B water system to notify users when violations occur within the Group B system.

- (2) Content. Notices shall provide:
- (a) A clear, concise, and simple explanation of the violation;
- (b) Discussion of any potential adverse health effects and what population is at risk;
- (c) Mandatory health effects information where required;
- (d) A list of steps the purveyor took or is planning to take to correct the violation;
- (e) A list of steps the consumer should take until the violation is corrected, including advice on seeking an alternative water supply if necessary; and
 - (f) The purveyor's name and phone number.

Additional information may be provided by the purveyor to further explain the violation.

(3) Distribution.

- (a) Community systems in violation of a primary MCL, treatment technique or variance or exemption schedule shall provide:
- (i) Newspaper notice within fourteen days of violation;
- (ii) Direct mail notice or hand delivery to all permanent residences served by the system within forty-five days of the violation. The department may waive mail or hand delivery if the violation is corrected within forty-five days;
- (iii) Notice to radio and television stations serving the area within seventy—two hours of violation of a nitrate MCL or other acute violation as determined by the department; and
- (iv) Repeat mail or hand delivery every three months until violation is corrected.
- (b) Community systems in violation of a monitoring requirement, testing procedure, or operating under a variance or exemption schedule shall provide newspaper notice within three months of the violation or granting of a variance or exemption. The systems shall also provide repeat notice by mail or hand delivery every three months until the violation is corrected or for as long as the variance or exemption remains in effect.
- (c) NTNC and TNC systems in violation of a primary MCL, treatment technique, variance, or exemption schedule shall post a notice within fourteen days of the violation. The notice shall remain posted while the violation exists. If the violation is acute, posting shall be required within seventy—two hours.
- (d) NTNC and TNC systems in violation of a monitoring requirement, testing procedure, or operating under a variance or exemption schedule shall post a notice within three months of the violation or granting of a variance or exemption.
- (e) Where there is mention of a newspaper notice in this section, posting may be substituted in the absence of a newspaper of general circulation.
- (f) Posted notices shall be placed in conspicuous locations and presented in a manner making the posted notices easy to read. Notices shall remain posted until the violation is corrected or for as long as the variance or exemption remains in effect. When appropriate, notices shall be multi-lingual.
- (g) Notice to new billing units. The purveyor of a community water system shall give a copy of the most recent public notice for an outstanding violation to all new billing units or new hookups before or at the time water service begins.
 - (4) Fluoride.
- (a) When a secondary MCL violation occurs, the purveyor of a **community** water system shall send notice to:
 - (i) The department annually;
 - (ii) Consumers served by the system annually; and
 - (iii) New billing units added while the violation exists.
- (b) The notice shall include specific mandatory language available in a department guideline titled Health Effects Language For Drinking Water Public Notification.

- (5) When circumstances dictate a broader and/or more immediate notice be given to protect public health, the department may require notification by whatever means necessary.
- (6) When a substance does not exceed an MCL, but is measured at a department—determined level of health significance, the department may require the purveyor to notify the water system users.
- (7) When a public water system is granted a waiver by the state board of health, the purveyor shall notify customers and new billing units or new hookups before water service begins. Notice shall be provided annually with a copy going to the department.
- (8) The department may give notice to the water system users required by this section on behalf of the water purveyor. However, the purveyor remains responsible for ensuring the requirements are met.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–330, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99–339. 89–21–020 (Order 336), § 248–54–187, filed 10/10/89, effective 11/10/89.]

PART 4. WATER SYSTEM OPERATIONS

- WAC 246-290-400 Operator certification. A certified operator is required per chapter 70.119 RCW and chapter 248-55 WAC for the following public water systems:
 - (1) Those serving one hundred services or more; and
- (2) Those serving twenty-five or more persons year-round which are supplied by a surface water source and are required to filter.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–400, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–194, filed 2/17/88.]

- WAC 246-290-410 Small water system management program. (1) The purpose of a small water system management program is to assure the water system:
- (a) Is properly and reliably managed and operated, and
- (b) Continues to exist as a functional and viable entity.
- (2) A small water system management program shall be developed and implemented for all systems not required to complete a water system plan as described under WAC 248-54-065.
- (3) The department shall have the authority to require submission of this program for review and comment when:
 - (a) A new water system is proposed;
 - (b) A new project is proposed for an existing system;
- (c) An existing system has problems associated with inadequate or improper management or operations;
- (d) Requested by the department for an existing system not having approved engineering documents, such as, or similar to, those described under WAC 248-54-086 and 248-54-096; or
 - (e) There is a change in ownership of the system.

- (4) A department guideline titled *Planning Handbook* is available to assist the purveyor in establishing the level of detail and content of the management program. Content and detail shall be consistent with the size, complexity, past performance, and use of the public water system. General content topics shall include, but not be limited to, the following elements:
 - (a) Ownership and decision-making issues;
 - (b) Financial capability; and
 - (c) Operations.
- (5) The department may require changes be made to a small water system management program if necessary to effectively accomplish the program's purpose.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–410, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99–339. 89–21–020 (Order 336), § 248–54–196, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–196, filed 2/17/88.]

- WAC 246-290-420 Reliability. (1) Any public water system or expansion or modification of an existing system shall provide an adequate quantity and quality of water in a reliable manner at all times.
- (a) In determining whether a proposed public water system or an expansion or modification of an existing system is capable of providing an adequate quantity of water, the department shall consider the immediate as well as the reasonably anticipated future needs of the system's consumers.
- (b) In determining whether an existing public water system is providing an adequate quantity of water, the department shall consider the needs of the system's existing consumers exclusively, unless, in the department's discretion, consideration of the needs of potential consumers is in the public interest.
- (2) The purveyor shall ensure the system is constructed, operated, and maintained to protect against failures of the power supply, treatment process, equipment, or structure with appropriate back—up facilities. Security measures shall be employed to assure the water source, water treatment processes, water storage facilities, and the distribution system are under the strict control of the purveyor.
- (3) Where fire flow is required, a positive pressure at the water meter or property line shall be maintained throughout the system under fire flow conditions.
- (4) Water pressure at the customer's service meter or property line if a meter is not used shall be maintained at the approved design pressure under MID conditions. In no case shall the pressure be less than twenty psi under MID conditions.
- (5) Water use restrictions as a designed operation practice shall not be allowed. However, water use restrictions may be allowed in times of drought.
- (6) No intake or other connection shall be maintained between a public water system and a source of water not approved by the department.
- (7) A purveyor shall maintain twenty-four-hour phone availability and shall respond to customer concerns and service complaints in a timely manner.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–420, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99–339. 89–21–020 (Order 336), § 248–54–201, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–201, filed 2/17/88.]

- WAC 246-290-430 Continuity of service. (1) No purveyor shall transfer system ownership without providing written notice to the department and all customers. Such notice shall be provided at least one year prior to the transfer, unless the new owner agrees to an earlier date. Notification shall include a time schedule for transferring responsibilities, identification of the new owner, and under what authority the new ownership will operate. If the system is a corporation, identification of the registered agent shall also be provided.
- (2) It shall be the responsibility of the utility transferring ownership to ensure all health-related standards pursuant to chapter 248-54 WAC are met during transfer of the utility. It shall also be the responsibility of the utility transferring ownership to inform and train the new owner regarding operation of the utility.
- (3) No purveyor shall end utility operations without providing written notice to all customers and the department at least one year prior to termination of service.
- (4) Where this section may be in conflict with existing state statutes, the more stringent statute shall prevail.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–430, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–205, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83–19–002 (Order 266), § 248–54–205, filed 9/8/83.]

- WAC 246-290-440 Treatment facility operation. (1) A bypass shall neither be established nor maintained to divert water around any feature of a treatment process, except with the approval of the department.
- (2) The water purveyor may allow treatment by other organizations or individuals only in a manner approved by the department.
- (3) When chlorine is used on a ground water source for disinfection or as otherwise directed by the department, and the pH does not exceed 8.0, the purveyor shall maintain a minimum free chlorine residual of 0.2 milligrams per liter (mg/L) in all active parts of the distribution system. The minimum contact time provided before the first customer shall be:
- (a) Thirty minutes if 0.2 mg/L free chlorine residual is maintained, or
- (b) Ten minutes if 0.6 mg/L free chlorine residual is maintained.
- (4) The department may require the purveyor to provide longer contact times, higher chlorine residuals, or additional treatment for the following sources:
 - (a) Surface water,
 - (b) Shallow wells,
 - (c) Springs,
 - (d) Infiltration galleries,
 - (e) Those with high turbidity,
 - (f) Those with high pH, and
- (g) Other sources particularly susceptible to contamination as identified by the department.

(5) All water purveyors using chlorination shall monitor chlorine residual at representative points in the system on a daily basis or as approved by the department. The analyses shall be conducted per the most recently published edition of Standard Methods for the Examination of Water and Waste Water. Reports shall be sent to the department, in a format acceptable to the department, within ten days of the end of the reporting month. In order to assure adequate monitoring of chlorine residual, the department may require the use of continuous chlorine residual analyzers and recorders.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–440, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–215, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83–19–002 (Order 266), § 248–54–215, filed 9/8/83.]

WAC 246-290-450 Watershed control. (1) All public water systems utilizing surface water shall adequately exercise surveillance over conditions affecting source water quality.

- (2) Those public water systems using unfiltered surface waters shall, in addition to subsection (1) of this section, document a watershed control program. All facilities and activities in the watershed affecting public health shall be under the surveillance of the water purveyor and shall be satisfactorily limited and controlled so as to preclude degradation of the physical, chemical, microbiological, viral, and radiological quality of the source of supply.
- (3) Those public water systems using unfiltered surface water shall submit to the department for approval a report identifying all conditions, activities, and facilities within the watershed, together with an acceptable program for necessary surveillance, limitation, and control. This report shall be part of the water system plan required in WAC 248-54-065, included in a small water system management program as required in WAC 248-54-196, or prepared independently for those systems not required to have such a plan. A section in the department guideline titled *Planning Handbook* deals with watershed control and is available to assist utilities in adequately addressing the following basic elements:
 - (a) Watershed description,
 - (b) Watershed control,
 - (c) System operation, and
 - (d) Water quality trends.

The report shall be updated as needed or required by the department.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-290-450, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.04.045. 88-05-057 (Order 307), § 248-54-225, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83-19-002 (Order 266), § 248-54-225, filed 9/8/83.]

WAC 246-290-460 Fluoridation of drinking water. (1) Where fluoridation is practiced, the concentration of fluoride shall be maintained in the range 0.8 through 1.3 mg/L. Determination of fluoride concentration shall be made daily, and reports of such analyses shall be submitted to the department, in a format acceptable to the department, within ten days of the end of the reporting

month. Such analyses shall be made in accordance with procedures listed in the most recently published edition of Standard Methods for the Examination of Water and Waste Water.

(2) Monthly check samples shall be taken down-stream, at the first sample tap where adequate mixing has taken place, from each fluoride injection point. These samples should be taken at the same place and time as the routine daily check samples. The samples along with a completed form shall be sent to the state public health laboratory, or a laboratory certified by the state, to test fluoride. A comparison of the results should then be made between samples analyzed in the field and the appropriate monthly check sample to assure the results are equivalent and field equipment is operating properly. An increased sampling schedule may be applied by the department if necessary to assure the adequacy and consistency of fluoridation.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–460, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–235, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83–19–002 (Order 266), § 248–54–235, filed 9/8/83.]

WAC 246-290-470 Distribution reservoirs. Existing uncovered distribution reservoirs shall be operated based on a plan of operation approved by the department. The plan of operation shall address the following elements as a minimum:

- (1) Disinfection.
- (2) Control of debris and undesirable growths of algae or other aquatic organisms.
 - (3) Control of airborne contamination.
 - (4) Construction.
 - (5) Security.
 - (6) Monitoring and reporting.

[Statutory Authority: RCW 43.20.050. 91-02-051 (Order 124B), recodified as § 246-290-470, filed 12/27/90, effective 1/31/91; 83-19-002 (Order 266), § 248-54-245, filed 9/8/83.]

WAC 246-290-480 Analyses and records, reporting. (1) The purveyor shall keep the following records of operation and water quality analyses:

- (a) Records of bacteriological and turbidity analyses shall be kept for five years. Records of chemical analyses shall be kept for as long as the system is in operation. Other records of operation and analyses required by the department shall be kept for three years. All records shall bear the signature of the operator in responsible charge of the water system or his or her representative. Group A systems shall keep these records available for inspection by the department and shall send the records to the department if requested. Actual laboratory reports may be kept or data may be transferred to tabular summaries, provided the following information is included:
- (i) The date, place, and time of sampling, and the name of the person collecting the sample;
- (ii) Identification of the sample as to whether it was a routine distribution system sample, check sample, raw or drinking water sample, or other special purpose sample;
 - (iii) Date of analysis;

- (iv) Laboratory and person responsible for performing analysis;
 - (v) The analytical technique/method used; and
 - (vi) The results of the analysis.
- (b) Records of action taken by the system to correct violations of primary drinking water regulations and copies of public notifications shall be kept for three years after the last action taken with respect to the particular violation involved.
- (c) Copies of any written reports, summaries, or communications, relating to sanitary surveys of the system conducted by system personnel, by a consultant or by any local, state, or federal agency, shall be kept for ten years after completion of the sanitary survey involved.
- (d) Where applicable, daily records of operation and analyses shall include the following:
 - (i) Chlorine residual;
 - (ii) Fluoride level;
- (iii) Water treatment plant performance including, but not limited to:
 - (A) Type of chemicals used and quantity,
 - (B) Amount of water treated, and
 - (C) Results of analyses.
 - (iv) Turbidity; and
 - (v) Other information as specified by the department.
 - (2) Reporting.
- (a) Except where a shorter reporting period is specified, the purveyor shall report monthly to the department. Reports shall be submitted prior to the tenth of the following month and include all tests, measurements, or analyses.
 - (b) Water facilities inventory and report form (WFI).
- (i) Purveyors of community systems shall submit an annual WFI update to the department.
- (ii) Purveyors of NTNC, TNC, and Group B systems shall submit an updated WFI to the department as requested.
- (iii) The purveyor shall also submit an updated WFI to the department within thirty days of any change in name, category, ownership, or responsibility for management of the water system.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–480, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99–339. 89–21–020 (Order 336), § 248–54–265, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–265, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83–19–002 (Order 266), § 248–54–265, filed 9/8/83.]

WAC 246-290-490 Cross-connection control. (1) General.

- (a) Purveyors have the responsibility to protect public water systems from contamination due to cross—connections. Cross—connections which can be eliminated shall be eliminated. The purveyor shall work cooperatively with local authorities to eliminate or control potential cross—connections.
- (b) The purveyor shall develop and implement a cross-connection control program acceptable to the department. The scope and complexity of the program shall be directly related to the size of the system and the

potential public health risk. A department guideline titled *Planning Handbook* is available to assist the utility in developing this program. The most recently published edition of the manual titled *Accepted Procedure and Practice in Cross Connection Control – Pacific Northwest Section – American Waterworks Association* shall be used as a resource to establish:

- (i) Minimum cross-connection control operating policies;
- (ii) Backflow prevention assembly installation practices;
- (iii) Backflow prevention assembly testing procedures; and
 - (iv) Enforcement authority.

Purveyors and local authorities shall have the option of establishing more stringent requirements.

- (c) The purpose of a cross-connection control program is to protect the health of water consumers and the potability of the public water system by assuring:
- (i) The inspection and regulation of plumbing in existing and proposed piping networks; and
- (ii) The proper installation and surveillance of backflow prevention assemblies when actual or potential cross-connections exist and cannot be eliminated.
- (d) The cross-connection control program shall be included in the water system's plan under WAC 248-54-065 or small water system management program as outlined under WAC 248-54-196, whichever is appropriate.
- (e) When an existing cross—connection poses a potential health or system hazard, the purveyor shall shut off water service to the premises until the cross—connection has been eliminated or controlled by the installation of a proper backflow prevention assembly. The cross—connection control program manager for the department shall be notified when a service has been shut off.
- (2) Backflow prevention assembly installation and testing.
 - (a) If a cross-connection cannot be eliminated, then:
- (i) An air-gap separation, reduced pressure principle backflow prevention assembly (RPBA) or a reduced pressure principle detector backflow prevention assembly (RPDA) shall be installed if the cross-connection creates an actual or potential health or system hazard.
- (ii) An air-gap separation, RPBA, RPDA, double-check valve backflow prevention assembly (DCVA), or double-check detector backflow prevention assembly (DCDA) shall be installed if the cross-connection is objectionable, but does not pose an unreasonable risk to health.
- (iii) A pressure vacuum breaker assembly (PVBA) or an atmospheric vacuum breaker may be installed where the substance which could backflow is objectionable but does not pose an unreasonable risk to health and where there is no possibility of backpressure in the downstream piping.
- (iv) Backflow prevention assemblies, appropriate for the degree of hazard or air gaps and in some cases both, shall be installed at the service connection or within the following facilities, unless in the judgment of the water purveyor and the department, no hazard

exists: Hospitals, mortuaries, clinics, laboratories, piers and docks, sewage treatment plants, food and beverage processing plants, chemical plants using water process, metal plating industries, petroleum processing or storage plants, radioactive material processing plants or nuclear reactors, car washes, facilities having a nonpotable auxiliary water supply, and others specified by the department.

- (b) All installed RPBA's, RPDA's, DCVA's, DCDA's, and PVBA's shall be models included on the current list of backflow assemblies, approved for installation in Washington state, and maintained and published by the department. Backflow prevention assemblies in service, but not listed, shall remain in service provided the backflow prevention assemblies:
- (i) Are listed on the current Washington state-approved cross-connection control assembly list at the time of installation;
 - (ii) Are properly maintained;
- (iii) Are of a type appropriate for the degree of hazard; and
- (iv) Are tested and successfully pass the test annually. When unlisted assemblies are moved or require more than minimum maintenance, the unlisted assemblies shall be replaced by an assembly listed on the current approved model list.
- (c) All air gaps and backflow prevention assemblies shall be installed in accordance with the cross-connection control manual referenced under WAC 248-54-285 (1)(b) of this section.
- (d) The purveyor may permit the substitution of a properly installed air gap in lieu of an approved backflow prevention assembly. All such air gap substitutions shall be inspected annually by a Washington state certified backflow assembly tester.
- (e) A Washington state certified backflow assembly tester shall inspect and test all:
 - (i) RPBA's,
 - (ii) RPDA's,
 - (iii) DCVA's,
 - (iv) DCDA's,
 - (v) New PVBA installations, and
- (vi) Existing PVBA's discovered through routine inspections.
 - (f) Tests and/or inspections shall be conducted:

- (i) At the time of initial installation;
- (ii) Annually after initial installation, or more frequently if tests indicate repeated failures; and
 - (iii) After the assembly is repaired.
- (g) The assemblies shall be repaired, overhauled, or replaced whenever found to be defective. The purveyor shall require that improperly installed or altered air gaps be replumbed or replaced by an approved RPBA at their discretion. Inspections, tests, and repairs shall be made under the purveyor's supervision and records thereof kept as required by the purveyor.
- (h) The purveyor shall deny or discontinue water service to any customer failing to cooperate in the installation, maintenance, testing, or inspection of backflow prevention assemblies required by the regulations of this chapter.
- (3) Washington state certified backflow assembly testers.
- (a) A backflow assembly tester shall become certified and maintain certification per department backflow assembly tester certification program guidelines.
- (b) The department shall maintain a list of persons certified to test backflow prevention assemblies.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–490, filed 12/27/90, effective 1/31/91. Statutory Authority: P.L. 99–339. 89–21–020 (Order 336), § 248–54–285, filed 10/10/89, effective 11/10/89. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–285, filed 2/17/88. Statutory Authority: RCW 43.20.050. 83–19–002 (Order 266), § 248–54–285, filed 9/8/83.]

WAC 246-290-500 Severability. If any provision of this chapter or its application to any person or circumstances is held invalid, the remainder of this chapter, or the application of the provision to other persons or circumstances, shall not be affected.

[Statutory Authority: RCW 43.20.050. 91–02–051 (Order 124B), recodified as § 246–290–500, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 34.04.045. 88–05–057 (Order 307), § 248–54–291, filed 2/17/88.]

FEES

WAC 246-290-990 Water system project review and approval fees. (1) The review and approval fees for planning, engineering, and construction documents required under chapters 248-54 and 248-56 WAC shall be as follows:

(a) Water system plans

Project Type	Class 4	Class 2 & 3	100 To 999 Services	1,000 or More Services
Water system plan	No Plan Required	No Plan Required	500.00	1,000.00

			Class 1	
Project Type	Class 4	Class 2 & 3	100 To 999 Services	1,000 or More Services
Water system plan letter update or coordinated water system plan or water system planning questionnaire	No Fee	No Fee	No Fee	No Fee
(b) Project engineering reports				ass 1
Project Type	Class 4	Class 2 & 3	100 To 999 Services	1,000 or More Services
All types of filtration or other complex treatment processes	250.00	500.00	1,000.00	1,500.00
Chemical addition for corrosion control, or Fe and Mn control	No Report Required	No Report Required	300.00	500.00
Disinfection or fluori- dation when no other process is involved	No Report Required	No Report Required	100.00	200.00
Complete water system which requires a detailed report to show how it will meet standards and regulations and operate properly	No Report Required	No Report Required	400.00	700.00
Major system modifications such as source, storage, or transmission, which change the system enough to require a detailed	100.00	200.00	300.00	500.00
report to show how it will meet the regulations				

			Class 1	
Project Type	Class 4	Class 2 & 3	100 To 999 Services	1,000 or More Services
All types of filtration or other complex treatment processes	250.00	500.00	1,000.00	1,500.00
Chemical addition for corrosion control or Fe and Mn control or disinfection or fluoridation when no other treatment process is involved	100.00	150.00	300.00	400.00
Complete water system which has not and will not be constructed prior to approval	200.00	400.00	600.00	800.00

			CI	ass 1
roject Type	Class 4	Class 2 & 3	100 To 999 Services	1,000 or More Services
New source of supply for an existing water system	150.00	200.00	300.00	400.00
Standard plans and speci- fications for water line installation, or booster pump station, or storage reservoir, or transmission/ distribution water lines	100.00	150.00	200.00	300.00
Well-site approval including the site inspection and hydro- geologic information review	100.00	100.00	100.00	100.00
Water system compliance report	75.00	75.00	75.00	75.00

- (2) Additional review and approval fees may be assessed as follows:
- (a) The basic fee covers services through the second review letter. If additional services or submittals are required for an approval to be made, an additional twenty-five percent of the original fee will be assessed for each subsequent service or review.
- (b) Fees for approval of as-built plans and specifications for water system projects which were constructed without written approval, shall be twice the amount shown in subsection (1)(c) of this section.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–290–990, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 43.20A.055. 87–14–066 (Order 2493), § 440–44–048, filed 7/1/87; 83–14–038 (Order 1980), § 440–44–048, filed 6/30/83.]

Chapter 246–292 WAC WATER WORKS OPERATOR CERTIFICATION

WAC	
246-292-001	Purpose.
246-292-010	Definitions.
246-292-020	Applicability.
246-292-030	Certification board.
246-292-040	Classification schedule for public water systems.
246-292-050	Minimum certification requirements for public water systems.
246-292-060	Minimum education and experience requirements for water works operators.
246-292-070	Examination.
246-292-080	Certification without examination.
246-292-090	Renewal of certificates.
246-292-100	Revocation.
246-292-110	Violations.
246-292-120	Purpose.
246-292-130	Notice of decision—Adjudicative proceeding.
246-292-140	Certificate denial—Adjudicative procedure.
246-292-150	Certificate suspension, modification, or revocation—Adjudicative procedure.
246-292-990	Waterworks operator certification fees.

WAC 246-292-001 Purpose. Pursuant to the provisions of chapter 70.119 RCW, the regulations set forth in this chapter are adopted for the protection of public health through the establishment of minimum requirements and standards by which operators in direct responsible charge of public water systems are examined and certified as to their competency. Certification under this act is available to all operators who can meet the minimum qualifications of a given classification. All operators are encouraged to be certified to their highest degree of competency based on their responsibilities and their particular specialties within the field.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-292-001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.119.050. 78-10-053 (Order 1343), § 248-55-010, filed 9/22/78.]

WAC 246-292-010 Definitions. (1) "Board" – The board established pursuant to RCW 70.95B.070 which shall be known as the water and waste water operator certification board of examiners.

- (2) "Continuing education unit (CEU)" A nationally recognized unit of measurement similar to college credits. One CEU is awarded for every ten contact lecture hours of participation in an organized continuing education experience, under responsible sponsorship, capable direction and qualified instruction. One CEU will also be awarded for twenty contact laboratory hours of approved training.
- (3) "Department" The department of social and health services.
- (4) "Direct responsible charge (DRC)" DRC experience is defined as active daily, on—site charge and performance of the operation of a public water system, purification plant, distribution system, or a major segment of a distribution system or purification plant.

- (5) "Distribution system" That portion of a public water system not included within the scope of the purification plant. In most cases this shall include source, storage, and distribution network facilities and associated unit processes which are not part of the purification plant.
- (6) "Governing body" The policy setting body or individual(s) responsible for the supervision and management of a public water system.
- (7) "Nationally recognized association of certification authorities" An organization which serves as an information center for certification activities, recommends minimum standards and guidelines for classification of potable water treatment plants, water distribution systems and waste water facilities and certification of operators, facilitates reciprocity between state programs and assists authorities in establishing new certification programs and updating existing ones.
- (8) "Owner" The policy setting body or individual(s) responsible for the supervision and management of a public water system.
- (9) "Public water system" Any system or water supply intended or used for human consumption or other domestic uses, including source, treatment, storage, transmission and distribution facilities where water is furnished to any community, collection or number of individuals, or is made available to the public for human consumption or domestic use, but excluding water systems serving one single family residence.
- (10) "Purification plant" That portion of a public water system which treats or improves the physical, chemical or bacteriological quality of the system's water to bring the water into compliance with state board of health standards. Unit processes installed as necessary to perform water filtration, ion exchange, electrodialysis, reverse osmosis, or iron and manganese removal shall be included within the scope of the term purification plant. Unit processes installed as necessary to allow in–line fluoridation, in–line chlorination, or chemical addition to inhibit corrosion shall not be included within the scope of the term purification plant.
- (11) "Secretary" The secretary of the department of social and health services.
- (12) "Service" A connection between the purveyor's distribution system and the customer's system. If the customer's system distributes to more than one single family dwelling, individual dwelling unit, site, or lot, then each single family dwelling, individual dwelling unit, site, or lot shall be considered as one service connection.
- (13) "Voluntary certification program" Operators not required to be certified under the mandatory certification program are encouraged to seek certification under the voluntary certification program which shall be administered by the board and shall be identical to the mandatory certification program.
- (14) "Water filtration system" A series of unit processes installed with the intent of reducing the quantity and quality of suspended and dissolved solids such that the treated water meets the quality standards set forth in

the rules and regulations of the state board of health regarding public water systems (chapter 248-54 WAC).

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-292-010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.119.050. 78-10-053 (Order 1343), § 248-55-020, filed 9/22/78.]

- WAC 246-292-020 Applicability. (1) After January 1, 1979, all public water systems are required to have a certified operator if the system serves either:
 - (a) One hundred services at any one time; or
- (b) Twenty-five or more persons which are supplied from a stream, lake or other surface water supply source and which are required by law to use a water filtration system.
- (2) Certified personnel shall be in direct responsible charge of the active daily technical direction and supervision of the following portions of affected public water systems:
 - (a) The entire public water system; or
- (b) A major segment of a public water system necessary for monitoring or improving the quality of water provided separate individuals are assigned decision—making authority; or
 - (c) Shift supervisors, if shift work is practiced.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–292–020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.119.050. 78–10–053 (Order 1343), § 248–55–030, filed 9/22/78.]

- WAC 246-292-030 Certification board. (1) The water and wastewater operator certification board of examiners established pursuant to RCW 70.95B.070 shall oversee the administration of the certification program.
 - (2) The board shall be composed of:
 - (a) One member from the department of ecology.
- (b) One member from the department of social and health services.
- (c) One member who holds the position of city manager, city engineer, director of public works, superintendent of utilities, or an equivalent position and employs a certified operator.
- (d) Two members who are certified water operators holding a certificate of at least the second highest operator classification.
- (e) Two members who are certified wastewater operators holding a certificate of at least the second highest classification.
 - (3) Duties of the board shall include:
- (a) Recommend to the secretary classifications of distribution systems and purification plants and maintain records thereof;
- (b) Develop operator qualification standards consistent with the distribution system and purification plant classification system and examine the qualifications of applicants for certification;
- (c) Assist in the development of rules and regulations; prepare, administer and evaluate examinations of operator competency as required by law; and recommend the issuance or revocation of certificates;

ITEM

treatment provided.

carbon, etc.)

lime, pH adjustment, etc.)

WASTE HANDLING In plant treatment of sludge

Chlorination or Comparable

On-site Generation of Disinfectant

FLUORIDATION

DISINFECTION

Aeration

Filtration

IRON OR IRON/MN REMOVAL

ADJUSTMENT - Points assigned only for

to those listed above or where it is the only

Chemical Addition for Stabilization (polyphosphate, soda,

Taste and Odor or Color Control (KMn04, activated

LABORATORY CONTROL BY PLANT PERSONNEL

ADVANCED TREATMENT (demineralization)

specific chemical treatment in addition

Chemical Oxidation by KMn04

Chemical Oxidation by Cl2

POINTS

4

8

15

6

5

5

ASSIGNED

(4) To assist in the administration of this chapter, the representative from the department on the board shall serve as board secretary.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-292-030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.119.050. 78-10-053 (Order 1343), § 248-55-040, filed 9/22/78.]

WAC 246-292-040 Classification schedule for public water systems. The secretary shall use classification procedures recommended by a nationally recognized association of certification to classify purification plants and distribution systems.

(1) Purification plants are classified by the secretary in four groups:

(a)	Classification	Total	Points Assigned
	Group 1		30 and less
	Group 2		31 to 55
	Group 3		56 to 75
	Group 4		76 and greater

(b) Points are assigned to every item in Table 1 that applies to the purification plant being evaluated.

•			(See Table 2 for Variable Point Guide)	
	TABLE 1 PLANT CLASSIFICATION	POINTS	Bacteriological (Complexity) Chemical/Physical (Complexity)	3–10 1–10
∦ ∦ ₹ŢĪĀ∯		ASSIGNED	Total	1-10
SIZE			* Each category should be considered a major unit process assigned only once for each unit or combined unit, i.e. f	or iron re-
Maximum Population Served (Peak Day)	1 point per 10,000 or part Maximum of 10 points	1-10	moval using oxidation and precipitate removal by filtration ten points for iron removal and nothing for filtration.	n, only add
Design Flow (Average Day) Or Peak Month's	1 point per MGD or part Maximum of 10 points	1–10	(c) Table 2 is to be used as a supplement to T	Γable 1.
Production (Average Day), Whichever Is Larger			TABLE 2 PURIFICATION PLANT VARIABLE POINT GUI	DE
WATER SUPPLY SOURCE Groundwater Surface Water		3 5	Variation in Raw Water Quality The key concept is the variation or change in the quality of the raw water source. Point values are:	0 - 10
Average Raw Water Quality (Good to Poor)	See Table 2 for Variable Point Guide	0-10	Little or no variation; no treatment provided except chlorination. Raw water quality (other than turbidity) varies enough to require treatment changes approxi-	0
COAGULATION, SEDIMEN	FATION, FILTRATION		mately 10 percent of the time.	2
Presettling Addition of Coagulant		4 4	Raw water quality (turbidity) varies severely enough to require pronounced and/or very frequent treatment changes.	5
Mixing, flocculation, settling, or Upflow solids contact	4 8	4 or 8	Raw water quality subject to periodic serious industrial waste pollution.	10
Filtration CHEMICAL PRECIPITATIO	N SOFTENING	6	Laboratory Control by Plant Personnel Bacteriological/biological (complexity) – The key concept is to credit bacti/bio lab work done on-site	0 - 10
Presettling	TO TENTE	4	by plant personnel. Point values are:	
Addition of chemicals/coagulants		4	Lab work done outside the plant. Membrane filter procedures.	0 3
Mixing, flocculation, settling, or	4	4 or 8	Use of fermentation tubes or any dilution method; fecal coliform determination. Biological identification.	. 5
Upflow solids contact Recarbonation Filtration	8	2 6	Virus studies or similarly complex work conducted on-site.	10
ION EXCHANGE SOFTENIN	NG	10	Chemical/physical (complexity) – The key concept is to credit chemical/physical lab work done on-site	0 - 10
Ion Exchange Softening [Title 246 WAC—p 336]		10	by plant personnel. Point values are:	(1990 Ed.)

POINTS

	ASSIGNED
	0
Lab work done outside the plant.	0
Push button or colorimetric methods for simple test	S
such as chlorine residual, pH, -up to	3
Additional procedures such as titration, jar tests, al	=
kalinity, hardness-up to	- 5
More advanced determinations such as numerous	S
inorganics-up to	7
Highly sophisticated instrumentation such as atomic	c
absorption and gas chromatography.	10

ITEM

(2) Distribution systems are classified by the secretary in four groups, according to the population served. The classification schedule is as follows:

Classification	Population Served*		
Group 1	less than	1500	
Group 2	1501 —	15,000	
Group 3	15,001 -	50,000	
Group 4	greater than	50,000	

^{*}If the population served is not known; then apply this formula: Number of Service Connections x 3.1 = Population Served

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-292-040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.119.050. 78-10-053 (Order 1343), § 248-55-050, filed 9/22/78.]

- WAC 246-292-050 Minimum certification requirements for public water systems. (1) Public water systems shall be classified by the secretary in accordance with the procedures in WAC 248-55-050. Accordingly, an operator certified at the appropriate level shall be in direct responsible charge of the active daily technical direction and supervision of the following portions of the public water system.
- (a) Purification plant A water treatment plant operator (WTPO) shall be in direct responsible charge of that portion of any public water system which is classified as a purification plant and which meets the conditions of WAC 248-55-030 (1)(a) or (b). The WTPO shall be responsible for the administration and operation of the purification plant and shall be certified at a level determined by the complexity of the purification plant as determined by a point rating system. (See WAC 248-55-050(1) for point rating system details.)
- (b) Water distribution system A water distribution manager (WDM) shall be in direct responsible charge of all public water systems which meet the conditions of WAC 248-55-030 (1)(a) or (b). The WDM shall be responsible for the administration and operation of the entire public water system or a major segment of a public water system necessary for monitoring or improving the quality of water and shall be certified at a level determined by the population served. (See WAC 248-55-050(2) for rating details.)
- (c) Distribution system specialties A third classification of operator certification, water distribution specialist (WDS), shall be available to operators on a voluntary basis. Any person who is engaged in a specialized phase of waterworks operation such as main repair, meter repair, pump maintenance and operation, service installation, chlorination process operation, or watershed control but is not working in a direct responsible charge

capacity is encouraged to become certified as a water distribution specialist.

- (2) If the public water system normally practices shift work; then a certified operator shall be in direct responsible charge for each operating shift.
- (3) The same individual may be certified as a WDM, WTPO, or WDS.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-292-050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.119.050. 78-10-053 (Order 1343), § 248-55-060, filed 9/22/78.]

WAC 246-292-060 Minimum education and experience requirements for water works operators. (1) Minimum education and experience requirements for the following classifications and grades of operators shall be:

Table 3

MINIMUM EDUCATION AND EXPERIENCE REQUIREMENTS

EDUCATION/OPERATING EXPERIENCE

(DRC)	2200,111	01., 01		2,112	
	OIT *	I	11	111	IV
Water Distribution Manager (WDM)	12/3 months	12/1	12/3	14/4(2)	16/4(2)
Water Treatment Plant Operator (WTPO)	12/3 months	12/1	12/3	14/4(2)	16/4(2)
Water Distribution Specialist (WDS)	12/3 months	12/1	12/3	14/4(2)	16/4(2)
Cross-Connection Control Specialist (CC)	NA	**	***	NA	NA

(Education and experience requirements are expressed in years unless otherwise noted.)

*Operator in training experience can be fulfilled by 3 months experience or 30 hours of relevant classroom training (3 CEU)

**Experience required is a special 30-hour backflow prevention device testers class that includes hands-on-training, lectures, and a field trip

trip
***Experience required is training as a cross-connection control instructor and certification as a CCI

- (2) Substitution The board may allow substitutions of experience when short of formal education, or vice versa.
- (3) Policy A listing of minimum requirements and responsibilities for each classification and grade including rules regarding substitutions shall be adopted by the board and published by the department.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-292-060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.119.050. 78-10-053 (Order 1343), § 248-55-070, filed 9/22/78.]

WAC 246-292-070 Examination. (1) The board shall prepare examinations to be used in determining the competency of operators.

- (2) Periodic review and revision of the examinations shall be undertaken as necessary to ensure validity and applicability.
- (3) Certificates of competency shall be issued to applicants who successfully pass the examination for the classification and grade for which they were eligible.

- (4) Applicants who fail to pass an examination may repeat the same examination at no additional fee at the next regularly scheduled examination.
- (5) Examinations shall be held at least three times annually at convenient places and times as set by the board. Advance announcements of places and times shall be published by the department.
- (6) The board shall forward its recommendations for certification to the secretary.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-292-070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.119.050. 78-10-053 (Order 1343), § 248-55-080, filed 9/22/78.]

- WAC 246-292-080 Certification without examination. (1) The secretary shall issue certificates without examination under the following conditions:
- (a) Certificates, in appropriate classifications, shall be issued to operators who on January 1, 1978, held certificates of competency attained through the voluntary certification program sponsored jointly by the Pacific Northwest Section of the American Water Works Association and the department.
- (b) Certificates shall be issued to persons certified by a governing body or owner of a public water system to have been the operators of a purification plant or distribution system on January 1, 1978, but only to those who are required to be certified in accordance with WAC 248-55-030. A certificate so issued shall be conditioned to be valid only for operating the existing plant or system.
- (c) A nonrenewable certificate, temporary in nature, may be issued to an operator for a period not to exceed twelve months to fill a vacated position required to have a certified operator. Only one such certificate may be issued subsequent to each instance of vacation of any such position.
- (d) The board may, at its discretion, waive examinations for applicants holding certificates or licenses issued by other states or provinces having equivalent standards as determined by the board, and issue a class of certificate in accordance with the requirements contained herein.
- (2) Certificates without examination shall be issued only upon receipt of a completed application form and fees as required in this chapter.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-292-080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.119.050. 78-10-053 (Order 1343), § 248-55-090, filed 9/22/78.]

WAC 246-292-090 Renewal of certificates. (1) The terms for all certificates shall be for one year from the date of issuance. Every certificate shall be renewed annually upon the payment of a renewal fee and satisfactory evidence presented to the board that the operator has demonstrated continued professional growth in the field. The accumulation of three college credits or continuing education units every three years is considered satisfactory evidence of professional growth.

- (2) The secretary shall notify operators failing to renew the operator certificate before the end of the certificate year that the certificates are temporarily valid for two months following the end of the certificate year. Certificates not renewed during the two month period shall become invalid. The secretary shall notify the holders of invalid certificates with a written notice.
- (3) An operator failing to renew the certificate pursuant to the provisions of this section may reapply for certification. The board may require the operator to meet the requirements established for new applicants.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-292-090, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 201, Laws of 1982. 82-13-009 (Order 1823), § 248-55-110, filed 6/4/82. Statutory Authority: RCW 70.119.050. 78-10-053 (Order 1343), § 248-55-110, filed 9/22/78.]

- WAC 246-292-100 Revocation. (1) The secretary may, with the recommendation of the board and after hearing before same, revoke a certificate if:
- (a) It is found to have been obtained by fraud or deceit:
- (b) The operator demonstrates gross negligence in the operation of a water purification plant or a public water system's operation or major segment thereof; or
- (c) The operator violates the requirements of this chapter or any lawful rules, order or regulation of the secretary.
- (2) No person whose certificate has been revoked under this section shall be eligible for a certificate for one year from the effective date of the final order of revocation. Any such person who reapplies for recertification shall meet all the requirements established for new applications.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-292-100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.119.050. 78-10-053 (Order 1343), § 248-55-120, filed 9/22/78.]

- WAC 246-292-110 Violations. (1) Following thirty days written notice by the secretary violation of WAC 248-55-030 is a misdemeanor. Each day that a public water system operates in violation of WAC 248-55-030 constitutes a separate offense. Upon conviction, violators are subject to fines not exceeding one hundred dollars for each such offense.
- (2) In the case of fraud, deceit, or gross negligence under WAC 248-55-120 (1)(a) and (b), no revocation citation or change shall be made until proper written notice of violation and reasonable opportunity for correction has been made.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-292-110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.119.050. 78-10-053 (Order 1343), § 248-55-130, filed 9/22/78.]

WAC 246-292-120 Purpose. These rules implement chapter 70.119 RCW and are adopted pursuant to RCW 70.119.050.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-292-120, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.119.050. 82-24-070 (Order 1917), § 248-55-210, filed 12/1/82.]

- WAC 246-292-130 Notice of decision--Adjudicative proceeding. (1) The department's notice of a denial, suspension, modification, or revocation of a certificate of competency shall be consistent with RCW 43.20A.XXX and section 95, chapter 175, Laws of 1989. An applicant or certificate holder has the right to an adjudicative proceeding to contest the decision.
- (2) A certificate applicant or holder contesting a department certificate decision shall within twenty-eight days of receipt of the decision:
- (a) File a written application for an adjudicative proceeding by a method showing proof of receipt with the Office of Appeals, P.O. Box 2465, Olympia, WA 98504; and
 - (b) Include in or with the application:
- (i) A specific statement of the issue or issues and law involved;
- (ii) The grounds for contesting the department decision; and
 - (iii) A copy of the contested department decision.
- (3) The proceeding is governed by the Administrative Procedure Act (chapter 34.05 RCW), this chapter, and chapter 248-08 WAC. If a provision in this chapter conflicts with chapter 248-08 WAC, the provision in this chapter governs.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-292-130, filed 12/27/90, effective 1/31/91. Statutory Authority. Chapter 34.05 RCW, RCW 34.05.220 (1)(a) and 70.119.050. 90-06-019 (Order 039), § 248-55-220, filed 2/28/90, effective 3/1/90. Statutory Authority: RCW 70.119.050. 82-24-070 (Order 1917), § 248–55–220, filed 12/1/82.]

WAC 246-292-140 Certificate denial--Adjudicative procedure. The procedure for an adjudicative proceeding to contest the denial of a certificate is chapter 248-08 WAC. If a provision in this chapter conflicts with chapter 248-08 WAC, the provision in this chapter governs.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-292-140, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 34.05 RCW, RCW 34.05.220 (1)(a) and 70.119.050. 90-06-019 (Order 039), § 248-55-235, filed 2/28/90, effective 3/1/90.]

WAC 246-292-150 Certificate suspension, modification, or revocation--Adjudicative procedure. This section contains the procedure for an adjudicative proceeding to contest the suspension, modification, or revocation of a certificate.

- (1) The board members shall preside at the adjudicative proceeding. The proceeding shall be conducted in accordance with the Administrative Procedure Act (chapter 34.05 RCW), this chapter, and chapter 248-08 WAC. If a provision in this chapter conflicts with chapter 248-08 WAC, the provision in this chapter governs.
- (2) The board may have an administrative law judge assigned to assist the board at the hearing. The administrative law judge shall:
 - (a) Conduct the hearing;
- (b) Offer advice and assistance to the board upon request by the board; and
 - (c) Not be a member of the board.

- (3) The department has the burden of proving its case by a preponderance of the credible evidence.
- (4) At least four members of the board including the water industry representative must consider the record. A majority of the board members who considered the record shall make a written recommendation to the secretary to, or not to, revoke the certificate. The recommendation shall conform to RCW 34.05.461.
- (5) The board's recommendation shall be personally delivered to the certificate holder or mailed by certified mail to the certificate holder's last known residence or business address or served in another manner showing proof of receipt.
- (6) If the board's recommendation is not to suspend, modify, or revoke the certificate, the recommendation shall be a final order as defined under chapter 34.05 RCW.
- (7) If the board's recommendation is to suspend, modify, or revoke the certificate, the recommendation shall be an initial order as defined under chapter 34.05 RCW. The recommendation shall become the final order if no petition for administrative review is filed. If a petition for review is filed, the secretary or designee shall make the final adjudicative order.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-292-150, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 34.05 RCW, RCW 34.05.220 (1)(a) and 70.119.050. 90-06-019 (Order 039), § 248-55-240, filed 2/28/90, effective 3/1/90. Statutory Authority: RCW 70.119.050. 82-24-070 (Order 1917), § 248-55-240, filed 12/1/82.]

WAC 246-292-990 Waterworks operator certification fees. (1) The initial certification fee is twenty dollars per classification.

- (2) The annual renewal fee is ten dollars per classification.
- (3) The fee for application for reciprocity shall be forty dollars per classification.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-292-990, filed 12/27/90, effective 1/31/91. Statutory Authority: 1982 c 201. 82-13-011 (Order 1825), § 440-44-080, filed 6/4/82.]

Chapter 246-293 WAC WATER SYSTEM COORDINATION ACT

WAC

246-293-001

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WAC 246-293-001 Purpose. This chapter is promulgated pursuant to the authority granted in the Public Water System Coordination Act of 1977, chapter 70.116 RCW, for the purpose of implementing a program relating to public water system coordination within the state of Washington, for evaluation and determination of critical water supply service areas, and assistance for orderly and efficient public water system planning.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodifed as § 246-293-001, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78-07-048 (Order 1309), § 248-56-100, filed 6/28/78.]

PART I. PROCEDURAL REGULATIONS

WAC 246-293-110 Definitions. (1) "Public water system" – Any system or water supply intended or used for human consumption or other domestic uses including, but not limited to, source, treatment, storage, transmission and distribution facilities where water is furnished to any community, number of individuals or is made available to the public for human consumption or domestic use. This definition shall exclude any water system serving one single family residence, water systems existing prior to September 21, 1977 which are owner operated and serve less than ten single family residences, and water systems serving no more than one industrial plant.

(2) "Purveyor" – Any agency or subdivision of the state or any municipality, firm, company, mutual or cooperative association, institution, partnership, person, or any other entity that owns or operates a public water

system for wholesale or retail service (or their authorized agent).

- (3) "Municipality" Any county, city, town, or any other entity having its own incorporated government for local affairs including, but not limited to, metropolitan municipal corporation, public utility district, water district, irrigation district, sewer district, and/or port district.
- (4) "Inadequate water quality" An excess of maximum contaminant levels established by the state board of health (chapter 248–54 WAC).
- (5) "Unreliable service" Low pressure or quantity problems, and/or frequent service interruption inconsistent with state board of health requirements (chapter 248–54 WAC).
- (6) "Lack of coordinated planning" Failure to resolve existing or potential areawide problems related to:
- (a) Insufficient control over development of new public water systems.
- (b) Adjacent or nearby public water systems constructed according to incompatible design standards.
- (c) No future service area agreements, or conflicts in existing or future service areas.
- (d) Adjacent public water systems which could benefit from emergency interties or joint—use facilities.
- (e) Water system plans which have not been updated in accordance with chapter 248-54 WAC.
- (f) Inconsistencies between neighboring water system plans, or failure to consider adopted county or city land use plans or policies.
- (7) "Critical water supply service area" A geographical area designated by the department or county legislative authority characterized by public water system problems related to inadequate water quality, unreliable service, and/or lack of coordinated water system planning. It may be further characterized by a proliferation of small, inadequate public water systems, or by water supply problems which threaten the present or future water quality or reliability of service in such a manner that efficient and orderly development may best be achieved through coordinated planning by public water systems in the area.
- (8) "County legislative authority" The board of county commissioners or that body assigned such duties by a county charter as enacting ordinances, passing resolutions, and appropriating public funds for expenditure.
- (9) "Local planning agency" The division of city or county government responsible for land use planning functions.
- (10) "Coordinated water system plan" A plan for public water systems within a critical water supply service area which identifies the present and future water system concerns and sets forth a means for meeting those concerns in the most efficient manner possible.
- (11) "Existing service area" A specific area within which direct service or retail service connections to customers of a public water system are currently available.
- (12) "Future service area" A specific area for which water service is planned by a public water system, as determined by written agreement between purveyors provided for in WAC 248-56-730.

(13) "Department" – The Washington state department of social and health services.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–293–110, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78–07–048 (Order 1309), § 248–56–200, filed 6/28/78.]

WAC 246-293-120 Preliminary assessment—Requirement. In areas where public water systems are suspected of having problems related to inadequate water quality, unreliable service, or lack of coordinated planning, a preliminary assessment shall be undertaken to determine if the geographical area should be designated a critical water supply service area. (See WAC 248-56-200 for definitions.)

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-120, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78-07-048 (Order 1309), § 248-56-300, filed 6/28/78.]

WAC 246-293-130 Preliminary assessment—Procedures. (1) The preliminary assessment shall be conducted under the authority of the county legislative authority(ies) and the department with assistance from affected state and local agencies and water purveyors.

- (2) Notice that a preliminary assessment is being undertaken shall be made to all affected parties, those who have demonstrated an interest, and the local news media.
- (3) The preliminary assessment shall be presented in report form, as short and factual as possible, and shall consider at least the following topics as they relate to public water systems in the potential critical water supply service area:
 - (a) Existing water systems, including:
 - (i) History of water quality, reliability and service,
 - (ii) General fire fighting capability of the utilities, and
- (iii) Identification of major facilities which need to be expanded, altered, or replaced.
- (b) Availability and adequacy of future water source(s).
- (c) Service area boundaries, including a map of established boundaries and identification of systems without established boundaries.
 - (d) Present growth rate.
- (e) Status of water system planning, land use planning, and coordination, including a list of land use plans and policies adopted by local general purpose governments.
- (4) Upon completion, the preliminary assessment shall be submitted to the county legislative authority(ies) and the department for review. A copy shall also be transmitted to all potentially affected water purveyors and appropriate news media.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-130, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78-07-048 (Order 1309), § 248-56-310, filed 6/28/78.]

- WAC 246-293-140 Declaration of critical water supply service area. (1) Based upon review of the preliminary assessment, if findings indicate that a geographical area does have problems related to inadequate water quality, unreliable service, or lack of coordinated planning, the county legislative authority(ies) or the department shall declare that area a critical water supply service area.
- (2) The declaration shall be in the format of a legislative enactment signed by the county legislative authority(ies), or administrative declaration signed by the secretary of the department or his designee.
- (3) The declaring agency shall file its declaration with the other agency(ies) and notify in writing the appropriate local planning agencies, affected water purveyors, and the local news media within ten days.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–293–140, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78–07–048 (Order 1309), § 248–56–400, filed 6/28/78.]

WAC 246-293-150 Water utility coordinating committee—Establishment. (1) Within thirty days following the declaration of a critical water supply service area, a water utility coordinating committee composed of not less than three voting members shall be appointed by the declaring authority.

- (2) The water utility coordinating committee shall consist of one representative from each of the following:
- (a) County legislative authority within the declared area;
- (b) County planning agency having jurisdiction within the declared area;
- (c) Health agency having jurisdiction within the declared area under chapters 70.08, 70.05, 43.20 RCW; and
- (d) Water purveyor with over fifty services within the declared area.
- (Other interested persons may be appointed as non-voting members of the committee by the authority declaring the critical water supply service area if determined appropriate.)
- (3) At the first meeting of the water utility coordinating committee, the following shall be determined:
 - (a) Chairperson; and
- (b) Rules for conducting business, including voting procedure.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-150, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 89-16-065 (Order 2840), § 248-56-500, filed 7/31/89, effective 8/31/89; 78-07-048 (Order 1309), § 248-56-500, filed 6/28/78.]

WAC 246-293-160 Water utility coordinating committee—Purpose. (1) The initial purpose of the water utility coordinating committee shall be to recommend external critical water supply service area boundaries to the county legislative authority(ies) within six months of appointment of the committee. (See WAC 248-56-600.)

(2) Following establishment of external critical water supply service area boundaries, the water utility coordinating committee shall be responsible for development of the coordinated water system plan. (See WAC 248-56-740.)

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-160, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78-07-048 (Order 1309), § 248-56-510, filed 6/28/78.]

WAC 246-293-170 Establishment of external critical water supply service area boundaries—Procedures. (1) Proposed boundaries shall be documented by a writ-

ten report which includes:

- (a) A map and narrative description of the recommended boundary.
- (b) A narrative statement outlining the reasons for the recommended boundary location, the criteria used and relative importance of each.
- (2) Prior to submittal of recommended external boundaries to the county legislative authority(ies), the water utility coordinating committee shall conduct at least one informational meeting for the purpose of soliciting public input.
- (3) The water utility coordinating committee shall make a formal report of its recommended external critical water supply service area boundaries to the county legislative authority(ies).
- (4) The county legislative authority(ies) shall conduct at least two public hearings on the proposed boundaries within six months from the date the boundaries were submitted by the water utility coordinating committee, for the purpose of soliciting responses to the proposed boundaries.
- (5) Within six months from the date proposed boundaries are submitted to the county legislative authority(ies), one of the following actions may be taken by the county legislative authority(ies):
- (a) Ratify the proposed boundaries based on findings at the public hearings, or
- (b) Modify the proposed boundaries in accordance with findings of the public hearings, and then ratify the revised boundaries.

If neither of the above actions are taken by the county legislative authority(ies) within six months, the boundaries as stated in the proposal submitted by the water utility coordinating committee to said county legislative authority(ies) shall be automatically ratified.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-170, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78-07-048 (Order 1309), § 248-56-600, filed 6/28/78.]

WAC 246-293-180 Establishment of external critical water supply service area boundaries—Criteria. (1) The water utility coordinating committee, in recommending, and county legislative authority(ies), in determining the location of external critical water supply service area boundaries shall consider factors including, but not limited to:

- (a) Existing land use,
- (b) Projected land use and permitted densities as documented in adopted county or city plans, ordinances and/or growth policies for at least 10 years into the future,

- (c) Other planning activities or boundaries which may affect land use or water system planning,
- (d) Physical factors limiting provision of water service.
- (e) Existing political boundaries, including boundary agreements in effect and attitudes towards expanding those boundaries,
 - (f) Future service areas of existing utilities,
- (g) Hydraulic factors, including potential pressure zones or elevations,
- (h) Economic ability of the public water systems to meet minimum service requirements.
- (2) External critical water supply service area boundaries shall not divide any purveyor's existing, contiguous service area. Areas served by a wholesale purveyor may be divided into as many existing service areas as may be justified by geography, engineering or other factors discussed in the preliminary assessment.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-180, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78-07-048 (Order 1309), § 248-56-610, filed 6/28/78.]

WAC 246-293-190 Establishment of critical water supply service area boundaries—Effect. (1) No new public water system shall be approved within a critical water supply service area subsequent to establishment of external boundaries unless specifically authorized by the department. Authorization shall be based upon compliance with the following:

- (a) If unanticipated demand for water supply occurs within a purveyor's future service area, the following shall apply in the listed sequence:
- (i) The existing purveyor shall provide service in a timely and reasonable manner consistent with state board of health regulations; or
- (ii) A new public water system may be developed on a temporary basis. Before authorization, a legal agreement will be required which includes a schedule for the existing purveyor to assume management and/or connect the new public water system to the existing system; or
- (iii) A new public water system may be developed. Before authorization, a revised service area agreement establishing the new purveyor's future service area will be required.
- (b) If a demand for water supply occurs outside any purveyor's future service area, the following shall apply in the listed sequence:
- (i) Those persons anticipating the need for water service shall contact existing nearby purveyors within the critical water supply service area to determine whether any will be interested in expanding their system to provide water service in a timely and reasonable manner consistent with state board of health regulations.
- (ii) A new public water system may be developed on a temporary basis. Before authorization, a legal agreement will be required which includes a schedule for an existing system to assume management and/or connect the new public water system to an existing system; or
 - (iii) A new public water system may be developed.

Any of the options listed in subdivisions (b)(i), (b)(ii), or (b)(iii) will require establishment of new or revised service area agreements.

- (2) If a new public water system is developed, it shall have an approved water system plan pursuant to WAC 248-54-580 and the provisions of this chapter. The plan shall include a section addressing the outcome of subsections (1)(a), or (1)(b) along with documented confirmation by the appropriate existing purveyors(s).
- (3) Any proposed new public water system shall not be inconsistent with local adopted land use plans, shoreline management programs, and/or development policies as determined by the appropriate county or city legislative authority(ies).
- (4) If a coordinated water system plan has been approved for the affected area, all proposed new public water systems shall be consistent with the provisions of that plan.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-190, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78-07-048 (Order 1309), § 248-56-620, filed 6/28/78.]

- WAC 246-293-200 Alteration of external critical water supply service area boundaries. (1) After establishment of external critical water supply service area boundaries, those boundaries may not be altered until the coordinated water system plan is completed.
- (2) Alteration of external critical water supply service area boundaries may be initiated by the department or county legislative authority(ies) in accordance with the procedures and criteria identified in WAC 248-56-600 and 248-56-610. In addition:
- (a) The department or county legislative authority(ies), whichever initiates alteration of external boundaries, shall prepare a brief report documenting the need for such alteration, and
- (b) The department or county legislative authority(ies), whichever initiates preparation of the report, shall reconvene the water utility coordinating committee and present the report to the committee, together with instructions for committee action.
- (3) The coordinated water system plan shall be revised as necessary, due to alteration of external critical water supply service area boundaries, within six months of the date of such action taken by the county legislative authority(ies), unless an extended schedule is approved by the department.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-200, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78-07-048 (Order 1309), § 248-56-630, filed 6/28/78.]

WAC 246-293-210 Update of external critical water supply service area boundaries. External critical water supply service area boundaries shall be reviewed by the water utility coordinating committee and the county legislative authority(ies) at least once every five years, as part of the update of the coordinated water system plan. (See WAC 248-56-760.)

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-210, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78-07-048 (Order 1309), § 248-56-640, filed 6/28/78.]

WAC 246-293-220 Coordinated water system plan-Requirement. (1) A coordinated water system plan shall be required for the entire area within the external critical water supply service area boundaries.

- (2) In critical water supply service areas where more than one water system exists, a coordinated water system plan shall consist of either:
- (a) A compilation of water system plans approved pursuant to WAC 248-54-580, together with supplementary provisions addressing water purveyor concerns relating to the entire critical water supply service area (fulfilling requirements of WAC 248-56-710 and 248-56-720 respectively), or
- (b) A single plan covering all affected public water systems and areawide concerns within the external critical water supply service area boundaries (fulfilling requirements of both WAC 248-56-710 and 248-56-720).
- (3) The coordinated water system plan shall provide for maximum integration and coordination of public water system facilities consistent with the protection and enhancement of the public health and well-being.
- (4) The coordinated water system plan shall not be inconsistent with adopted county and city land use plans, ordinances, and/or growth policies addressing development within the critical water supply service area for at least five years beyond the date of establishment of external boundaries.
- (5) If no land use plans, ordinances, or growth policies are in effect for all or a portion of the area within the critical water supply service area at the time the coordinated water system plan is being prepared, the coordinated water system plan shall be based upon the best planning data available from the appropriate local planning agency(ies).
- (6) In critical water supply service areas where only one public water system exists, the coordinated water system plan shall consist of the water system plan for the water system. (See WAC 248-54-580 and 248-56-710.)

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–293–220, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78–07–048 (Order 1309), § 248–56–700, filed 6/28/78.]

WAC 246-293-230 Coordinated water system plan—Water system plan. (1) Each purveyor within the external critical water supply service area boundaries shall be responsible for completion of a water system plan for the purveyor's future service area, including provisions of WAC 248-56-730, if such a plan has not already been approved, with the following exception:

- (a) Nonmunicipally owned public water systems shall be exempt from the planning requirements (except for the establishment of service area boundaries pursuant to WAC 248-56-730) if they:
 - (i) Were in existence as of September 21, 1977; and

- (ii) have no plans for water service beyond their existing service area; and
- (iii) meet minimum state board of health requirements (chapter 248-54 WAC).

Note: If the county legislative authority permits a change in development that will increase the demand for water service of such a system beyond the existing system's ability to provide minimum water service, the purveyor shall develop a water system plan in accordance with this section.

- (2) Each purveyors' water system plan shall be updated at the time the coordinated water system plan is prepared, which will eliminate the necessity of updating the water system plan prior to the mandatory five year update of the coordinated water system plan.
- (3) The content of a water system plan shall be consistent with WAC 248-54-580 and shall comply with guidelines* which may be obtained from the department. These guidelines have been compiled to further assist in meeting the purpose of this chapter, and address three levels of planning requirements varying in detail, based upon the size of the public water system.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-230, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78-07-048 (Order 1309), § 248-56-710, filed 6/28/78.]

WAC 246-293-240 Coordinated water system plan—Supplementary provisions. (1) All water purveyors within the external critical water supply service area boundaries (with the exception of the systems specifically exempted in WAC 248-56-710(1)) shall be notified and asked to participate in the development of the supplementary provisions.

(2) The supplementary provisions shall address areawide water system concerns relating to the entire critical water supply service area. The content of the supplementary provisions shall comply with guidelines* which may be obtained from the department.

The supplementary provisions shall include, but not be limited to:

- (a) Assessment of related, adopted plans,
- (b) Identification of future service areas and service area agreements (WAC 248-56-730),
- (c) Minimum areawide water system design standards, including fireflow performance standards,
- (d) Procedures for authorizing new water systems in the critical water supply service area,
- (e) Assessment of potential joint—use or shared water system facilities and/or management programs.

*Copies of DSHS guidelines entitled, "Plan contents guidelines" may be obtained without charge from the Department of Social and Health Services, Water Supply and Waste Section, Mail Stop LD-11, Olympia, Washington 98504.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as \$ 246-293-240, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78-07-048 (Order 1309), \$ 248-56-720, filed 6/28/78.]

WAC 246-293-250 Service area agreements—Requirement. (1) The service area boundaries of public water systems within the critical water supply service area shall be determined by written agreement among

the respective existing purveyors and approved by the appropriate legislative authority(ies).

- (2) Future service area agreements shall be incorporated into the coordinated water system plan as provided for in the guidelines identified in WAC 248-56-720.
- (3) Future service area boundaries of public water systems shall be determined by existing purveyors. Criteria used in the establishment of future service areas should include, but not be limited to: Topography, readiness and ability to provide water, local franchise areas, legal water system boundaries, city limits, future population, land use projections, and sewer service areas.
- (4) All future service areas shall not be inconsistent with adopted land use plans, ordinances, and growth policies of cities, towns, and counties, located within the future service area boundaries.
- (5) Failure of the legislative authority(ies) to file with the department objections to service area agreements within 60 days of receipt of the agreement shall indicate automatic approval.
- (6) If no service area boundary agreement has been established after a conscientious effort by the purveyors within one year of establishment of the external critical water supply service area boundaries, or if the legislative authority(ies) has filed with the department objections in writing, the department shall hold a public hearing.
- (7) If a public hearing is required for the establishment of service areas the following procedures shall apply:
- (a) The department shall provide notice of the hearing by certified mail to:
- (i) Each purveyor providing service in the critical water supply service area,
- (ii) Each county legislative authority having jurisdiction in the area, and
 - (iii) The public pursuant to chapter 65.16 RCW.
 - (b) The hearing may be continued from time to time.
- (c) At the termination of the public hearing, the department may restrict the expansion of service of any purveyor within the external critical water supply service area boundaries if the department finds such restriction necessary to provide the greatest protection of the public health and well—being. (Individual retail or direct service connections shall not be considered an expansion.)

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \S 246–293–250, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78–07–048 (Order 1309), \S 248–56–730, filed 6/28/78.]

- WAC 246-293-260 Coordinated water system plan--Procedures (water utility coordinating committee). (1) Following establishment of external critical water
- supply service area boundaries, the water utility coordinating committee shall be responsible for the development of a coordinated water system plan.
- (2) No later than two months after establishment of the external critical water supply service area boundary the water utility coordinating committee shall meet for the purpose of formulating arrangements for:
- (a) Preparation of the coordinated water system plan, and

- (b) Public involvement.
- (3) The water utility coordinating committee shall meet as necessary in order to:
 - (a) Collect and assemble water system plans,
- (b) Provide input and direction for the preparation of the supplementary provisions,
- (c) Serve as a forum for developing and/or negotiating future service area agreements (WAC 248-56-730),
- (d) Accomplish other related business as determined by the committee.
- (4) Prior to submittal of the coordinated water system plan to the county legislative authority(ies) for review, the water utility coordinating committee shall:
- (a) Prepare written comments on the plan for the benefit of the reviewing authority(ies),
- (b) Conduct at least one public informational meeting for the purpose of soliciting public input,
- (c) Evaluate and respond to comments received at the hearing(s).

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-260, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78-07-048 (Order 1309), § 248-56-740, filed 6/28/78.]

WAC 246-293-270 Coordinated water system plan--Effect. (1) All purveyors constructing or proposing to construct public water system facilities within the area covered by the coordinated water system plan shall comply with the plan.

(2) At any time after two years of establishment of the external critical water supply service area boundaries, the department may deny proposals to establish or to expand any public water system within a critical water supply service area for which there is not an approved coordinated water system plan. (Individual retail or direct service connections shall not be considered an expansion.) (See WAC 248-56-620 for provisions pertaining to new public water systems in the interim two years.)

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-270, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78-07-048 (Order 1309), § 248-56-750, filed 6/28/78.]

WAC 246-293-280 Coordinated water system plan--Update. (1) The coordinated water system plan shall be reviewed and updated by the water utility coordinating committee at a minimum of every five years or sooner, if the water utility coordinating committee feels it is necessary, in accordance with both the provisions of WAC 248-54-580 and this section.

- (2) Changes in the coordinated water system plan shall be accomplished in accordance with procedures for developing a coordinated water system plan (WAC 248–56–740). If no changes are necessary, the water utility coordinating committee shall submit to the department a statement verifying that the coordinated water system plan is still current.
- (3) If the external critical water supply service area boundaries are altered by the county legislative

authority(ies) pursuant to WAC 248-54-630, the coordinated water system plan shall be updated as provided for in WAC 248-56-630.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-280, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78-07-048 (Order 1309), § 248-56-760, filed 6/28/78.]

WAC 246-293-290 Coordinated water system plan—Local review. (1) Prior to submission of a coordinated water system plan to the department for approval, the plan shall be reviewed by the county legislative authority(ies) in the county(ies) in which the critical water supply service area is located. County review of the coordinated water system plan shall include at least one public hearing.

(2) If no comments have been received from the county legislative authority(ies) within 60 days of receipt of the coordinated water system plan, the department may consider the plan for approval.

(3) If within 60 days of receipt of the coordinated water system plan, the county legislative authority(ies) find any segment of the plan to be inconsistent with adopted land use plans, shorelines master programs, the following shall occur:

(a) The county legislative authority(ies) shall submit written description of their determination and justification supporting their determination prior to the end of the 60 day period to the department and all affected parties.

(b) The county legislative authority(ies) shall make every effort to resolve any inconsistencies within 60 days of submittal of written justification.

- (c) The department may approve those portions of the coordinated water system plan found not to be inconsistent with adopted plans and policies at any time after the initial determination by the county legislative authority(ies).
- (d) If after the 60 day period established for resolution of inconsistencies an inconsistency still exists, the affected parties shall each present their final recommended alternative solution to the department. The department shall then review all alternative solutions and discuss its recommendations with the county(ies) and the water utility coordinating committee. If after two years of the declaration of the critical water supply service area the inconsistencies persist, the department may deny proposals to establish or to expand any public water system facilities which affect that portion of the critical water supply service area being contested.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-290, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78-07-048 (Order 1309), § 248-56-800, filed 6/28/78.]

WAC 246-293-300 Coordinated water system plan-Department approval. (1) A coordinated water system plan shall be submitted to the department for design approval within two years of the establishment of external critical water supply service area boundaries.

(a) In its review of the coordinated water system plan, the department shall ensure that every topic in the guidelines identified in WAC 248-56-720 has been covered to the extent necessary based on the size and nature of the water system(s) and characteristics of the critical water supply service area.

- (b) The department shall not approve those portions of a coordinated water system plan which fail to meet the requirements for future service area boundaries pursuant to WAC 248-56-730.
- (2) The department shall either approve the coordinated water system plan, or respond within 60 days from the date the plan is received.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-300, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78-07-048 (Order 1309), § 248-56-810, filed 6/28/78.]

WAC 246-293-310 Severability. If any provision of this chapter or its application to any person or circumstance is held invalid, the remainder of this chapter, or the application of the provision to other persons or circumstances, shall not be affected.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-310, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 78-07-048 (Order 1309), § 248-56-900, filed 6/28/78.]

PART II. RESOLUTION OF SERVICE AREA CONFLICTS

WAC 246-293-401 Purpose. The purpose of this chapter is to provide a process for resolving service area conflicts which arise from implementation of the Public Water System Coordination Act, chapter 70.116 RCW, and its procedural regulations, chapter 248-56 WAC.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-401, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 74.116.070 [70.116.070]. 83-01-015 (Order 1919), § 248-59-005, filed 12/6/82.]

- WAC 246-293-420 Public hearing. (1) If no service area boundary agreement has been established after a conscientious effort by existing water purveyors within one year of establishment of external critical water supply service area boundaries, or if the legislative authority or authorities have filed written objections with the department, the water supply and waste section of the department of social and health services (DSHS) shall work with the affected parties in an informal manner in order to reach an agreement.
- (2) If, in the judgment of the water supply and waste section of DSHS, informal negotiations with the affected parties fail to make progress toward reaching an agreement, the water supply and waste section of DSHS shall hold a public hearing to determine its course of action.
- (3) The water supply and waste section of DSHS shall provide at least thirty days' notice of the public hearing; thus, giving the affected parties a final opportunity to agree upon service area boundaries prior to the public hearing.
- (4) Notice of the public hearing shall be mailed by certified mail to:

- (a) Each purveyor providing service in the area of conflict;
- (b) Each legislative authority having jurisdiction in the area; and
 - (c) The public pursuant to chapter 65.16 RCW.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-420, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 74.116.070 [70.116.070]. 83-01-015 (Order 1919), § 248-59-010, filed 12/6/82.]

WAC 246-293-430 Initial decision. (1) The public hearing may be continued from time to time if good cause can be shown for such a continuance.

- (2) After conclusion of the hearing, the water supply and waste section of DSHS may decide to take no action or restrict any or all purveyors from carrying out improvements within the conflicting area. Affected parties shall be notified of the decision by certified mail. The decision shall be issued as a written report and include justification based upon:
 - (a) Compliance with DSHS regulations;
 - (b) A record of the hearing; and
 - (c) Criteria established in WAC 248-56-730.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–293–430, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 74.116.070 [70.116.070]. 83–01–015 (Order 1919), § 248–59–020, filed 12/6/82.]

WAC 246-293-440 Adjudicative proceeding. (1) Any party affected by the decision of the water supply and waste section of the department has the right to contest the decision in an adjudicative proceeding. If no appeal is filed, the decision of the water supply and waste section shall be final.

- (2) A person contesting a water supply and waste section decision shall within twenty-eight days of receipt of the decision:
- (a) File a written application for an adjudicative proceeding by a method showing proof of receipt with the Office of Appeals, P.O. Box 2465, Olympia, WA 98504; and
 - (b) Include in or with the application:
- (i) A specific statement of the issue or issues and law involved;
 - (ii) The grounds for contesting the decision; and
 - (iii) A copy of the contested decision.
- (3) The proceeding is governed by the Administrative Procedure Act (chapter 34.05 RCW), this chapter, and chapter 248–08 WAC. If a provision in this chapter conflicts with chapter 248–08 WAC, the provision in this chapter governs.
- (4) Evidence not considered by the water supply and waste section in making their decision shall not be admitted in the adjudicative proceeding unless agreed to by all parties.
- (5) The administrative law and review judge shall not modify the initial water supply and waste section decision unless the preponderance of evidence shows that decision is substantially or legally in error.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-440, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 34.05 RCW, RCW 34.05.220 (1)(a) and

70.116.050. 90-06-019 (Order 039), § 248-59-030, filed 2/28/90, effective 3/1/90. Statutory Authority: RCW 74.116.070 [70.116.070]. 83-01-015 (Order 1919), § 248-59-030, filed 12/6/82.]

PART III. FIRE FLOW

WAC 246-293-601 Purpose. This chapter is promulgated pursuant to the authority granted in the Public Water System Coordination Act of 1977, chapter 70.116 RCW, for the purpose of establishing minimum performance standards related to fire protection, including provisions for their application and enforcement, and incorporating them into the design and construction of new and expanding public water systems.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-601, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.116.080. 79-04-007 (Order 1378), § 248-57-010, filed 3/12/79.]

WAC 246-293-602 Scope. These standards and regulations shall apply to the following new and expanding public water systems:

- (1) Those having more than 1,000 services. (See WAC 248-54-580.)
- (2) Those with less than 1,000 services located within the boundaries of a critical water supply service area and subject to the requirement for a coordinated water system plan. (See WAC 248-54-580 and 248-56-700.)

Note: Public water systems in existence prior to September 21, 1977, which are owner operated and serve less than ten single family residences; serving no more than one industrial plant; or are nonmunicipally owned with no plans for water service beyond their existing service area are exempt from the planning requirement.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-602, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.116.080. 79-04-007 (Order 1378), § 248-57-200, filed 3/12/79.]

- WAC 246-293-610 Definitions. (1) "Public water system" Any system or water supply intended or used for human consumption or other domestic uses including, but not limited to, source, treatment, storage, transmission and distribution facilities where water is furnished to any community, number of individuals, or is made available to the public for human consumption or domestic use. This definition shall exclude any water system serving one single family residence, water systems existing prior to September 21, 1977, which are owner operated and serve less than ten single family residences, and water systems serving no more than one industrial plant.
- (2) "Expanding public water systems" Those public water systems installing additions, extensions, changes, or alterations to their existing source, transmission, storage, or distribution facilities which will enable the system to increase in size its existing service area. New individual retail or direct service connections onto an existing distribution system shall not be considered an expansion of the public water system.
- (3) "Department" The Washington state department of social and health services.

- (4) "Critical water supply service area" A geographical area designated by the department or county legislative authority characterized by public water system problems related to inadequate water quality, unreliable service, and/or lack of coordinated water system planning. It may be further characterized by a proliferation of small, inadequate water systems, or by water supply problems which threaten the present or future water quality or reliability of service in such a manner that efficient and orderly development may best be achieved through coordinated planning by public water systems in the area in accordance with chapter 248–56 WAC.
- (5) "Fire flow" The rate of water delivery needed for the purpose of fighting fires in addition to requirements for normal domestic maximum instantaneous demand as referenced in guidelines published by the department entitled "Design standards for public water supplies."
- (6) "Local fire protection authority" The fire district, city, town, or county directly responsible for the fire protection within a specified geographical area.
- (7) "Water system plan" A document identifying present and future water system needs and establishing a program for meeting those needs in the most efficient manner possible, and consistent with other relevant plans and policies affecting the area in which the system is located. (See WAC 248-54-580, 248-56-710 and 248-56-720, and the plan content guidelines for a detailed description of water system plans.)
- (8) "Existing service area" A specific area within which direct service or retail service connections to customers of a public water system are currently available.
- (9) "Future service area" A specific area for which water service is planned by a public water system as determined by written agreement between purveyors. (See WAC 248-56-730.)
- (10) "Planning jurisdiction" The city, town, county or other entity acting as the responsible agency for preparation and adoption of land use plans, policies or standards affecting development.
- (11) "Development classifications" Specific geographical areas within the existing and future service area of a public water system, identified for the purpose of determining the appropriate level of fire protection.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–293–610, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.116.080. 79–04–007 (Order 1378), § 248–57–100, filed 3/12/79.]

- WAC 246-293-620 Administration. (1) The department shall administer these regulations through its ongoing review and approval of water system plans and engineering reports as provided for in WAC 248-54-580, 248-54-590, and 248-56-810.
- (2) In the event that plans and specifications for water system improvements are submitted to the department for approval under WAC 248-54-600 and the design of the proposed improvements is inconsistent with development classifications identified in the water system plan,

(see WAC 248-57-400) the department shall not approve the plans and specifications.

(3) Plans and specifications for water system improvements (see WAC 248-54-600) proposed within those cities, towns, or counties which operate under local fire flow standards shall include written confirmation that they meet the requirements of adopted local standards from the authority administrating those standards. (See WAC 248-57-900.)

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-620, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.116.080. 79-04-007 (Order 1378), § 248-57-300, filed 3/12/79.]

WAC 246-293-630 Application. (1) Water system plans prepared by those public water systems identified in WAC 248-57-200 shall include a section in their plans addressing fire flow, hydrant and system reliability standards in accordance with WAC 248-57-500, 248-57-600, and 248-57-700 respectively. The section shall include a map entitled development classifications consistent with the following:

- (a) The map shall delineate the existing and future service area of the water system into the following categories:
- (i) Rural lot sizes greater than one acre (including parks, open space, agricultural lands, etc.)
- (ii) Residential lot sizes one acre or less, (including all single and multi-family structures less than 4000 square feet, and mobile home and recreational vehicle parks)
- (iii) Commercial and multi-family residential structures with a floor area 4000 square feet or greater.
 - (iv) Industrial
- (b) Assignment of the above categories shall be based upon:
 - (i) Existing development, and
- (ii) Future development for a minimum of ten years as identified in proposed or adopted land use plans and policies applicable within the existing and future service area.
- (c) The development classifications outlined in (a) above shall be determined by any method acceptable to the planning jurisdiction(s), provided that the criteria used is consistent within a given critical water supply service area.
- (2) The water system plan shall identify and schedule improvements needed in order for the water system to be capable of supplying required fire flow for new and expanding public water systems consistent with these regulations.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-630, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.116.080. 79-04-007 (Order 1378), § 248-57-400, filed 3/12/79.]

WAC 246-293-640 Minimum standards for fire flow. (1) City, town, or county legislative authority shall set minimum fire flows where local standards are adopted under WAC 248-57-900.

(2) Where local standards are not adopted under WAC 248-57-900, Table 1 shall identify minimum fire

flows. Contact with the county and local fire protection authority shall be made before applying these standards in a water system plan or to design of individual development.

TABLE 1 MINIMUM FIRE FLOWS*

Minimum

Development Classification Fire Flow Requirement

(as described under WAC 248-57-400)

ural None

Residential 500 gallons per minute for

30 minutes

Commercial and multifamily structures greater than 4000 sq. ft.

750 gallons per minute for

60 minutes**

Industrial

1000 gallons per minute for 60 minutes**

- * Minimum flows are in addition to requirements for normal domestic maximum use.
- ** Commercial and industrial buildings may be subject to higher flow requirements when evaluated on an individual basis by the local fire protection authority.

Note: Minimum standards in most cases require less flow than categories in the guidelines published by the Insurance Services Office (Municipal Survey Service, 160 Water Street, New York, New York 10038) and therefore may not result in lower insurance rates.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–293–640, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.116 RCW. 89–16–065 (Order 2840), § 248–57–500, filed 7/31/89, effective 8/31/89. Statutory Authority: RCW 70.116.080. 79–04–007 (Order 1378), § 248–57–500, filed 3/12/79.]

WAC 246-293-650 Minimum standards for fire hydrants. (1) In those areas where minimum fire flow requirements must be met, fire hydrants shall be provided in accordance with WAC 248-57-600. If phased installation of water facilities are approved by the department, fire hydrants do not need to be installed until source, storage, and transmission capacity needed to meet the minimum flow requirements are operational: *Provided*, That in such instances a "T" shall be installed every 900 feet where fire hydrants will be located.

- (2) Fire hydrants shall be located at roadway intersections wherever possible and the distance between them shall be no further than 900 feet.
- (3) All fire hydrants shall conform to American Water Works Association specifications for dry barrel fire hydrants. Each hydrant shall have at least two hose connections of 2 1/2" diameter each and one pumper connection. All connections must have national standard threads or other connection devices consistent with local fire protection authority requirements.
- (4) Fire hydrants shall be installed plumb and be set to the finished grade. The bottom of the lowest outlet of the hydrant shall be no less than eighteen inches above the grade. There shall be thirty-six inches of clear area about the hydrant for operation of a hydrant wrench on the outlets and on the control valve. The pumper port shall face the most likely route of approach of the fire

truck as determined by the local fire protection authority.

- (5) Fire hydrants shall be located so as to be accessible by fire engines and not be obstructed by any structure or vegetation or have the visibility impaired for a distance of fifty feet in the direction of vehicular approach to the hydrant. Fire hydrants subject to vehicle damage (e.g., such as those located in parking lots) shall be adequately protected.
- (6) Provisions shall be made to drain fire hydrant barrels to below the depth of maximum frost penetration.
- (7) Out of service fire hydrants shall be repaired as soon as possible.
- (8) Public water systems are encouraged to enter into contracts with local fire protection authorities to insure proper maintenance of fire hydrants.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-650, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.116.080. 79-04-007 (Order 1378), § 248-57-600, filed 3/12/79.]

WAC 246-293-660 Minimum standards for system reliability. (1) The public water system shall be capable of supplying minimum fire flows either by gravity, or under the following conditions where fire flows are supplied by pumping:

- (a) The largest pump out of service at any pumping level.
- (b) The highest capacity treatment unit out of service, while maintaining minimum acceptable standards of water quality.
- (c) A power outage in effect, unless the appropriate power utility(ies) records indicate a low incidence of electrical outage, defined as follows:
- (i) Outages shall average three or less per year based on data for the three previous years with no more than six outages in a single year. Power must be lost for a minimum of 30 minutes in order to qualify as an "outage."
- (ii) Outage duration shall average less than four hours based on data for the three previous years. Not more than one outage during the three previous year period shall have exceeded eight hours.
- (2) In assessing system reliability, the department shall also give consideration to potential reliability hazards such as reservoir repair or cleaning and/or lack of parallel water transmission lines.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-660, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.116.080. 79-04-007 (Order 1378), § 248-57-700, filed 3/12/79.]

WAC 246-293-670 Alternate methods. Fire protection may be provided by means other than those discussed in these regulations, provided that such alternate methods are fully documented in the water system plan and approved by both the local fire protection authority and the department.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-670, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.116.080. 79-04-007 (Order 1378), § 248-57–800, filed 3/12/79.]

WAC 246-293-680 Local standards. (1) Where standards in these regulations do not fully meet the fire protection needs of a city, town or county, the appropriate city, town or county legislative authority may promulgate fire flow and system reliability performance standards applicable within their respective jurisdiction. Such standards shall be fully documented and provide at least equal performance and protection as the minimum requirements contained in these regulations.

(2) Standards established by local jurisdictions shall be submitted to the department for review, and approval if they at least meet the minimum level of protection required by these regulations.

(3) The city, town, or county which adopts local fire flow or system reliability standards shall be responsible for administering those standards.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-680, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.116.080. 79-04-007 (Order 1378), § 248-57–900, filed 3/12/79.]

WAC 246-293-690 Severability. If any provision of the chapter or its application to any person or circumstance is held invalid, the remainder of this chapter or the application of the provision to other persons or circumstances, shall not be affected.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-293-690, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.116.080. 79-04-007 (Order 1378), § 248-57-990, filed 3/12/79.]

Chapter 246-310 WAC CERTIFICATE OF NEED

WAC	
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WAC 246-310-001 Purpose of certificate of need program. The purpose of the certificate of need program has been established by the legislature in RCW 70.38-.015.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), § 248–19–210, filed 2/28/86; 81–09–012 (Order 210), § 248–19–210, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), § 248–19–210, filed 11/30/79.]

WAC 246-310-002 Purpose of chapter 248-156 WAC. These rules and regulations are adopted pursuant to RCW 70.38.025 (6) and (12) for the purpose of establishing the index to be used and procedures for making adjustments to the "expenditure minimum" for capital expenditures and to the annual operating costs for new "institutional health services" which are subject to the requirements of the certificate of need program established under the provisions of chapter 70.38 RCW.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-002, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.025. 81-09-060 (Order 1641), § 248-156-010, filed 4/20/81.]

WAC 246-310-010 Definitions. For the purposes of chapter 248-19 WAC, the following words and phrases shall have the following meanings unless the context clearly indicates otherwise.

- (1) "Acute care facilities" means hospitals and ambulatory surgical facilities.
 - (2) "Affected persons" means:
 - (a) The applicant;
- (b) Health care facilities and health maintenance organizations providing services similar to the services under review and located in the health service area;

- (c) Third-party payers reimbursing health care facilities in the health service area;
- (d) Any agency establishing rates for health care facilities and health maintenance organizations in the health service area where the proposed project is to be located:
- (e) Health care facilities and health maintenance organizations which, in the twelve months prior to receipt of the application, have submitted a letter of intent to provide similar services;
- (f) Any person residing within the geographic area to be served by the applicant; and
- (g) Any person regularly using health care facilities within the geographic area to be served by the applicant.
- (3) "Alterations," see "construction, renovation, or alteration."
- (4) "Ambulatory care facility" means any place, building, institution, or distinct part thereof not a health care facility as defined in this section and operated for the purpose of providing health services to individuals without providing such services with board and room on a continuous twenty—four—hour basis. The term "ambulatory care facility" includes the offices of private physicians, whether for individual or group practice.
- (5) "Ambulatory surgical facility" means a facility, not a part of a hospital, providing surgical treatment to patients not requiring inpatient care in a hospital. This term does not include a facility in the offices of private physicians or dentists, whether for individual or group practice, if the privilege of using such facility is not extended to physicians or dentists outside the individual or group practice.
- (6) "Applicant," except as used in WAC 248-19-390, means any person proposing to engage in any undertaking subject to review under the provisions of chapter 70-.38 RCW.
- "Applicant," as used in WAC 248-19-390, means any person or individual with a ten percent or greater financial interest in a partnership or corporation or other comparable legal entity engaging in any undertaking subject to review under the provisions of chapter 70.38 RCW.
- (7) "Capital expenditure" means an expenditure, including a force account expenditure (i.e., an expenditure for a construction project undertaken by a nursing home facility as its own contractor), which, under generally accepted accounting principles, is not properly chargeable as an expense of operation or maintenance. The costs of any studies, surveys, designs, plans, working drawings, specifications, and other activities (including staff effort, consulting and other services which, under generally accepted accounting principles, are not properly chargeable as an expense of operation and maintenance) shall be considered capital expenditures. Where a person makes an acquisition under lease or comparable arrangement, or through donation, which would have required certificate of need review if the acquisition had been made by purchase, such acquisition shall be deemed a capital expenditure. Capital expenditures include donations of equipment or facilities to a nursing home facility, which if acquired directly by such facility,

would be subject to review under the provisions of this chapter and transfer of equipment or facilities for less than fair market value if a transfer of the equipment or facilities at fair market value would be subject to such review.

- (8) "Certificate of need" means a written authorization by the secretary's designee for a person to implement a proposal for one or more undertakings.
- (9) "Certificate of need program" means that organizational program of the department responsible for the management of the certificate of need program.
- (10) "Commencement of the project" means whichever of the following occurs first: In the case of a construction project, giving notice to proceed with construction to a contractor for a construction project; beginning site preparation or development; excavating or starting the foundation for a construction project; or beginning alterations, modification, improvement, extension, or expansion of an existing building. In the case of major medical equipment, installation. In the case of other projects, initiating a health service.
- (11) "Construction, renovation, or alteration" means the erection, building, remodeling, modernization, improvement, extension, or expansion of a physical plant of a health care facility, or the conversion of a building or portion thereof to a health care facility.
- (12) "Continuing care contract" means a contract providing a person, for the duration of that person's life or for a term in excess of one year, shelter along with nursing, medical, health—related, or personal care services. The contract is conditioned on the transfer of property, the payment of an entrance fee to the provider of such services, or the payment of periodic charges for the care and services involved. A continuing care contract is not excluded from this definition because the contract is mutually terminable or because shelter and services are not provided at the same location.
- (13) "Continuing care retirement community" means an entity providing shelter and services under a continuing care contract with the entity's members and sponsoring or including a health care facility or a health service.
- (14) "Days" means calendar days. Days are counted starting the day after the date of the event from which the designated period of time begins to run. If the last day of the period falls on a Saturday, Sunday, or legal holiday observed by the state of Washington, a designated period runs until the end of the first working day following the Saturday, Sunday, or legal holiday.

"Working days" exclude Saturdays, Sundays, and legal holidays observed by the state of Washington. Working days are counted in the same way as calendar days.

- (15) "Department" means the Washington state department of health.
- (16) "Ex parte contact" means any oral or written communication between any person in the certificate of need program or any other person involved in the decision regarding an application for, or the withdrawal of, a certificate of need and the applicant for, or holder of, a certificate of need, any person acting on behalf of the

applicant or holder, or any person with an interest regarding issuance or withdrawal of a certificate of need.

- (17) "Expenditure minimum" means one million dollars for the twelve-month period beginning with July 24, 1983, adjusted annually by the department according to the provisions of chapter 248-156 WAC.
- (18) "Health care facility" means hospitals, psychiatric hospitals, nursing homes, kidney disease treatment centers including freestanding dialysis units, ambulatory surgical facilities, continuing care retirement communities, hospices and home health agencies, and includes such facilities when owned and operated by a political subdivision or instrumentality of the state and such other facilities as required by federal law and implementing regulations, but does not include Christian Science sanatoriums operated or listed and certified by the First Church of Christ Scientist, Boston, Massachusetts. In addition, the term "health care facility" does not include any nonprofit hospital:
- (a) Operated exclusively to provide health care services for children;
 - (b) Which does not charge fees for such services; and
- (c) If not contrary to federal law as necessary to the receipt of federal funds by the state.
- (d) In addition, the term "health care facility" does not include a continuing care retirement community which:
 - (i) Offers services only to contractual members;
- (ii) Provides its members a contractually guaranteed range of services from independent living through skilled nursing, including some form of assistance with activities of daily living;
- (iii) Contractually assumes responsibility for costs of services exceeding the member's financial responsibility as stated in contract, so that, with the exception of insurance purchased by the retirement community or its members, no third party, including the Medicaid program, is liable for costs of care even if the member depletes personal resources;
- (iv) Offers continuing care contracts and operates a nursing home continuously since January 1, 1988, or obtained a certificate of need to establish a nursing home;
- (v) Maintains a binding agreement with the department of social and health services assuring financial liability for services to members, including nursing home services, shall not fall upon the department of social and health services;
- (vi) Does not operate, and has not undertaken, a project resulting in a number of nursing home beds in excess of one for every four living units operated by the continuing care retirement community, exclusive of nursing home beds; and
- (vii) Has undertaken no increase in the total number of nursing home beds after January 1, 1988, unless a professional review of pricing and long-term solvency was obtained by the retirement community within the prior five years and fully disclosed to members.
- (19) "Health maintenance organization" means a public or private organization, organized under the laws of the state, which:

- (a) Is a qualified health maintenance organization under Title XIII, Section 1310(d) of the Public Health Service Act; or
- (b)(i) Provides or otherwise makes available to enrolled participants health care services, including at least the following basic health care services: Usual physician services, hospitalization, laboratory, x-ray, emergency and preventive services, and out-of-area coverage;
- (ii) Is compensated (except for copayments) for the provision of the basic health care services listed in (b)(i) of this subsection to enrolled participants by a payment made on a periodic basis without regard to the date the health care services are provided and fixed without regard to the frequency, extent, or kind of health service actually provided; and
 - (iii) Provides physicians' services primarily:
- (A) Directly through physicians who are either employees or partners of such organization, or
- (B) Through arrangements with individual physicians or one or more groups of physicians (organized on a group practice or individual practice basis).
- (20) "Health service area" means a geographic region appropriate for effective health planning including a broad range of health services.
- (21) "Health services" means clinically related (i.e., preventive, diagnostic, curative, rehabilitative, or palliative) services and includes alcoholism, drug abuse, and mental health services.
- (22) "Home health agency" means an entity which is, or is to be, certified as a provider of home health services in the Medicaid or Medicare program. The department shall not require a home health agency previously issued a certificate of need as a new health care facility to obtain additional certificate of need approval if the agency has not received Medicare or Medicaid certification by the effective date of these rules.
- (23) "Hospice" means an entity which is, or is to be, certified as a provider of hospice services in the Medicaid or Medicare program. The department shall not require a hospice previously issued a certificate of need as a new health care facility to obtain additional certificate of need approval if the hospice has not received Medicare or Medicaid certification by the effective date of these rules.
- (24) "Hospital" means any institution, place, building or agency or distinct part thereof which qualifies or is required to qualify for a license under chapter 70.41 RCW, or as a psychiatric hospital licensed under chapter 71.12 RCW.
- (25) "Inpatient" means a person receiving health care services with board and room in a health care facility on a continuous twenty-four-hour-a-day basis.
- (26) "Intermediate care facility" means any institution or distinct part thereof certified as an intermediate care facility for participation in the Medicaid (Title XIX of the Social Security Act) program.
- (27) "Kidney disease treatment center" means any place, institution, building or agency or a distinct part thereof equipped and operated to provide services, including dialysis and/or kidney transplantation, to persons who have end-stage renal disease.

- (28) "May" means an act is permitted, but not required.
- (29) "Nursing home" means any home, place, institution, building or agency or distinct part thereof including a nursing unit or a long-term care area of a hospital operating or maintaining facilities providing convalescent or chronic care, or both, for a period in excess of twenty-four consecutive hours for three or more patients not related by blood or marriage to the operator, who, by reason of illness or infirmity, are unable properly to care for themselves. Convalescent and chronic care may include, but not be limited to, any or all procedures commonly employed in waiting on the sick, such as administration of medicines, preparation of special diets, giving of bedside nursing care, application of dressings and bandages, and carrying out of treatment prescribed by a duly licensed practitioner of the healing arts. Nursing home includes any such entity licensed or required to be licensed under the provisions of chapter 18.51 RCW and any other intermediate care facility or skilled nursing facility as these terms are defined in this section.
- (30) "Obligation," when used in relation to a capital expenditure, means the following has been incurred by or on behalf of a health care facility:
- (a) An enforceable contract has been entered into by a health care facility or by a person on behalf of the health care facility for the construction, acquisition, lease, or financing of a capital asset; or
- (b) A formal internal commitment of funds by a health care facility for a force account expenditure constituting a capital expenditure; or
- (c) In the case of donated property, the date on which the gift is completed in accordance with state law.
- (31) "Offer," when used in connection with health services, means the health facility provides one or more specific health services.
- (32) "Person" means an individual, a trust or estate, a partnership, a corporation (including associations, joint stock companies, and insurance companies), the state, or a political subdivision or instrumentality of the state, including a municipal corporation or a hospital district.
- (33) "Predevelopment expenditures" means capital expenditures, the total of which exceeds the expenditure minimum, made for architectural designs, plans, drawings, or specifications in preparation for the acquisition or construction of physical plant facilities. "Predevelopment expenditures" exclude any obligation of a capital expenditure for the acquisition or construction of physical plant facilities and any activity which the department may consider the "commencement of the project" as this term is defined in this section.
- (34) "Professional review of continuing care retirement community pricing and long-term solvency" means prospective financial statements, supported by professional analysis and documentation, which:
- (a) Conform to Principles and Practices Board Statement Number 9 of the Healthcare Financial Management Association, "Accounting and Reporting Issues Related to Continuing Care Retirement Communities"; and

- (b) Project the financial operations of the continuing care retirement community over a period of ten years or more into the future; and
- (c) Are prepared and signed by a qualified actuary as defined under WAC 284-05-060 or an independent certified public accountant, or are prepared by management of the continuing care retirement community and reviewed by a qualified actuary or independent certified public accountant who issues a signed examination or compilation report on the prospective financial statements; and
- (d) Include a finding by management that the intended expansion project of the continuing care retirement project is financially feasible.
- (35) "Project" means all undertakings proposed in a single certificate of need application or for which a single certificate of need is issued.
- (36) "Secretary" means the secretary of the Washington state department of health or the secretary's designee.
 - (37) "Shall" means compliance is mandatory.
- (38) "Skilled nursing facility" means any institution or distinct part thereof certified as a skilled nursing facility for participation in the Medicare (Title XVIII) or Medicaid (Title XIX) program.
- (39) "State health plan" means a document developed in accordance with RCW 70.38.065 and in effect until June 30, 1990, unless superseded by department—adopted rules.
- (40) "State Health Planning and Resources Development Act" means chapter 70.38 RCW.
- (41) "Tertiary health service" means a specialized service meeting complicated medical needs of people and requires sufficient patient volume to optimize provider effectiveness, quality of service, and improved outcomes of care.
- (42) "Undertaking" means any action subject to the provisions of chapter 248–19 WAC.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–010, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.38 RCW. 90–17–086 (Order 081), § 248–19–220, filed 8/17/90, effective 9/17/90; 90–02–093 (Order 023), § 248–19–220, filed 1/3/90, effective 2/3/90. Statutory Authority: RCW 70.38.135. 88–15–021 (Order 2639), § 248–19–220, filed 7/11/88; 86–06–030 (Order 2344), § 248–19–220, filed 2/28/86; 84–07–014 (Order 2082), § 248–19–220, filed 3/14/84; 81–09–012 (Order 210), § 248–19–220, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), § 248–19–220, filed 11/30/79.]

- WAC 246-310-020 Applicability of chapter 248-19 WAC. (1) The following undertakings shall be subject to the provisions of chapter 248-19 WAC, with the exceptions provided for in this section.
- (a) The construction, development, or other establishment of a new health care facility:
- (i) No new health care facility may be initiated as a health service of an existing health care facility without certificate of need approval as a new health care facility;
- (ii) The extension, on a regular and ongoing basis, of the services of a home health agency or a hospice in a county not previously regularly included in the service

- area of that home health agency or hospice during the preceding twelve months shall be considered the development of a new home health agency or hospice.
- (b) The sale, purchase, or lease of part or all of any existing hospital licensed under chapter 70.41 RCW or a psychiatric hospital licensed under chapter 71.12 RCW;
- (c) A change in bed capacity of a health care facility increasing the total number of licensed beds or redistributing beds among acute care, skilled nursing, intermediate care, and boarding home care, as defined under RCW 18.20.020, if the bed redistribution is effective for a period in excess of six months;
- (d) Any new tertiary health services offered in or through a health care facility, and not offered on a regular basis by, in, or through such health care facility within the twelve—month period prior to the time the facility will offer such services:
 - (i) Tertiary services include the following:
- (A) Specialty burn services. This is a service designed, staffed, and equipped to care for any burn patient regardless of the severity or extent of the burn. All staff and equipment necessary for any level of burn care are available;
- (B) Intermediate care nursery and/or obstetric services level II. Intermediate care nursery is defined in chapter 248–18 WAC. A level II obstetric service is in an area designed, organized, equipped, and staffed to provide a full range of maternal and neonatal services for uncomplicated patients and for the majority of complicated obstetrical problems;
- (C) Neonatal intensive care nursery and/or obstetric services level III. Neonatal intensive care nursery is defined in chapter 248–18 WAC. A level III obstetric service is in an area designed, organized, equipped, and staffed to provide services to the few women and infants requiring full intensive care services for the most serious type of maternal-fetal and neonatal illnesses and abnormalities. Such a service provides the coordination of care, communications, transfer, and transportation for a given region. Level III services provide leadership in preparatory and continuing education in prenatal and perinatal care and may be involved in clinical and basic research;
- (D) Transplantation of specific solid organs, including, but not limited to, heart, liver, pancreas, lung, and kidney and including bone marrow. A transplantation service for each solid organ is considered a separate tertiary service;
- (E) Open heart surgery and/or elective therapeutic cardiac catheterization including elective percutaneous translumenal coronary angioplasty (PTCA). Open heart surgery includes the care of patients who have surgery requiring the use of a heart lung bypass machine. Therapeutic cardiac catheterization means passage of a tube or other device into the coronary arteries or the heart chambers to improve blood flow. PTCA means the treatment of a narrowing of a coronary artery by means of inflating a balloon catheter at the site of the narrowing to dilate the artery;
- (F) Inpatient physical rehabilitation services level III. Level III rehabilitation services are services for persons

with usually nonreversible, multiple function impairments of a moderate—to—severe complexity resulting in major changes in the patient's lifestyle and requiring intervention by several rehabilitation disciplines. Services are multidisciplinary, including such specialists as a rehabilitation nurse; and physical, occupational, and speech therapists; and vocational counseling; and a physiatrist. The service is provided in a dedicated unit with a separate nurses station staffed by nurses with specialized training and/or experience in rehabilitation nursing. While the service may specialize (i.e., spinal cord injury, severe head trauma, etc.), the service is able to treat all persons within the designated diagnostic specialization regardless of the level of severity or complexity of the impairments;

- (G) Specialized inpatient pediatric services. The service is designed, staffed, and equipped to treat complex pediatric cases for more than twenty-four hours. The service has a staff of pediatric specialists and subspecialists.
- (ii) The department shall review, periodically revise, and update the list of tertiary services. The department shall change the tertiary services list following the procedures identified in WAC 248-19-235;
- (iii) The offering of an inpatient tertiary health service by a health maintenance organization or combination of health maintenance organizations is subject to the provisions under chapter 248–19 WAC unless the offering is exempt under the provisions of RCW 70.38.111.
- (e) Any increase in the number of dialysis stations in a kidney disease center;
- (f) Any capital expenditure in excess of the expenditure minimum for the construction, renovation, or alteration of a nursing home. However, a capital expenditure, solely for any one or more of the following, which does not substantially affect patient charges, is not subject to certificate of need review:
 - (i) Communications and parking facilities;
- (ii) Mechanical, electrical, ventilation, heating, and air conditioning systems;
 - (iii) Energy conservation systems;
- (iv) Repairs to, or the correction of, deficiencies in existing physical plant facilities necessary to maintain state licensure;
- (v) Acquisition of equipment, including data processing equipment, not for use in the direct provision of health services;
- (vi) Construction, involving physical plant facilities, including administrative and support facilities, not for use in the provision of health services;
 - (vii) Acquisition of land; and
 - (viii) Refinancing of existing debt.
- (g) Any expenditure for the construction, renovation, or alteration of a nursing home or change in nursing home services in excess of the expenditure minimum made in preparation for any undertaking subject to the provisions under chapter 248-19 WAC and any arrangement or commitment made for financing such undertaking;

- (h) No person may divide a project in order to avoid review requirements under any of the thresholds specified under this section; and
- (i) The department may issue certificates of need authorizing only predevelopment expenditures, without authorizing any subsequent undertaking for which the predevelopment expenditures are made.
- (2) No person shall engage in any undertaking subject to certificate of need review unless:
- (a) A certificate of need authorizing such undertaking is issued and remains valid; or
- (b) An exemption is granted in accordance with the provisions of this chapter.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-020, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.38 RCW. 90-21-028 (Order 082), § 248-19-231, filed 10/9/90, effective 10/9/90; 89-23-098 (Order 019), § 248-19-231, filed 11/21/89, effective 12/22/89.]

- WAC 246-310-030 Index and procedures for adjustment. (1) Index to be used. For the purposes of the certificate of need program, the United States Department of Commerce Composite Construction Cost Index shall be used in the annual adjustments of the following:
- (a) The "expenditure minimum" as this term is defined in RCW 70.38.025 and WAC 248-19-220; and
- (b) The minimum annual operating costs entailed in the provision of new "institutional health services," as this term is defined in RCW 70.38.025 and WAC 248–19–220, which will cause a new institutional health service to be subject to the provisions of chapter 248–19 WAC, the certificate of need rules and regulations.
 - (2) Procedure for adjustment.
- (a) On or before the first day of each January, the department shall adjust and publish the adjusted expenditure minimum for capital expenditures and the adjusted minimum annual operating costs for institutional health services. Such adjusted minimums shall be in effect during the entire calendar year for which they are established.
- (b) The adjustments in the minimums shall be based on the changes which occurred in the Department of Commerce Composite Construction Cost Index during the twelve month period ending the preceding October.
- (c) The adjusted minimums shall be published by the department by public notice in one or more newspapers of general circulation within the state and through a written notice sent to each health systems agency, the hospital commission, each health care facility subject to the requirements of the certificate of need program, each statewide organization of such health care facilities, and the state health coordinating council.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \S 246–310–030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.025. 81–09–060 (Order 1641), \S 248–156–030, filed 4/20/81.]

WAC 246-310-030A Tertiary services identification. (1) The criteria in this section shall be used as guidelines when examining services to determine whether the service is considered a tertiary service.

- (2) In determining whether a service is a tertiary service the department shall consider the degree to which the service meets the following criteria:
- (a) Whether the service is dependent on the skills and coordination of specialties and subspecialties. Including, but not limited to, physicians, nurses, therapists, social workers;
- (b) Whether the service requires immediate access to an acute care hospital;
- (c) Whether the service is characterized by relatively few providers;
 - (d) Whether the service is broader than a procedure;
 - (e) Whether the service has a low use rate;
- (f) Whether consensus supports or published research shows that sufficient volume is required to impact structure, process, and outcomes of care; and
- (g) Whether the service carries a significant risk or consequence.
- (3) Annually the department shall request review of proposed changes to the list of tertiary services identified in WAC 248-19-231. The annual review shall be conducted as follows:
- (a) The department shall send notice to all persons who have sent the certificate of need program a written request to be notified of the annual review of tertiary services.
 - (b) The notice shall contain the following:
- (i) Identification of the thirty-day period during which written comments may be received. This thirty-day period shall be called the comment period;
 - (ii) The criteria listed in this section; and
- (iii) The name and address of the person in the department to whom written comments are to be addressed.
- (c) The written comments must address whether a service meets or partially meets the criteria in this section.
- (d) Within sixty days after the close of the comment period the department shall determine whether to propose any changes to the list of tertiary services in chapter 248–19 WAC. This sixty-day period shall be called the consideration period.
- (e) During the consideration period information may be exchanged between the department and persons proposing changes to the list of tertiary services in chapter 248-19 WAC.
- (4) The department shall convene a technical work group at least every three years to do the following:
- (a) Review the criteria listed in this section to determine whether the criteria appropriately define a tertiary service; and
- (b) Propose any necessary changes to the list of tertiary services in WAC 248-19-231.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \$ 246–310–030A, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.38 RCW. 90–21–028 (Order 082), \$ 248–19–235, filed 10/9/90, effective 10/9/90.]

WAC 246-310-040 Exemptions from requirements for a certificate of need for health maintenance organizations. (1) Provisions for exemptions.

The secretary's designee shall grant an exemption from the requirements for a certificate of need for the offering of an inpatient institutional health service, the acquisition of major medical equipment for the provision of an institutional health service, or the obligation of a capital expenditure in excess of the expenditure minimum for the provision of an inpatient institutional health service to any entity meeting the eligibility requirements set forth in subsection (1)(a) of this section for such an exemption and submitting an application for an exemption meeting the requirements of subsection (1)(b) of this section.

(a) Eligibility requirements.

To be eligible for an exemption from the requirements for a certificate of need for the offering of an inpatient institutional health service, the acquisition of major medical equipment for the provision of an inpatient institutional health service, or the obligation of a capital expenditure in excess of the expenditure minimum for the provision of an institutional health service, an applicant entity shall be one of the following:

- (i) A health maintenance organization or a combination of health maintenance organizations if:
- (A) The organization or combination of organizations has, in the service area of the organization or the service areas of the organizations in the combination, an enrollment of at least fifty thousand individuals;
- (B) The facility in which the service will be provided is or will be geographically located so the service will be reasonably accessible to such enrolled individuals; and
- (C) At least seventy-five percent of the patients reasonably expected to receive the institutional health service will be individuals enrolled in such organization or organizations in the combination;
 - (ii) A health care facility if:
- (A) The facility primarily provides or will provide inpatient health services;
- (B) The facility is or will be controlled, directly or indirectly, by a health maintenance organization or a combination of health maintenance organizations which has, in the service area of the organization or service areas of the organizations in the combination, an enrollment of at least fifty thousand individuals;
- (C) The facility is or will be geographically located so the service will be reasonably accessible to such enrolled individuals; and
- (D) At least seventy—five percent of the patients reasonably expected to receive the institutional health service will be individuals enrolled with such organization or organizations in the combination; or
 - (iii) A health care facility (or portion thereof) if:
- (A) The facility is or will be leased by a health maintenance organization or combination of health maintenance organizations which has, in the service area of the organization or the service areas of the organizations in the combination, an enrollment of at least fifty thousand individuals and, on the date the application for an exemption is submitted, at least fifteen years remain in the term of the lease;

- (B) The facility is or will be geographically located so the service will be reasonably accessible to such enrolled individuals; and
- (C) At least seventy-five percent of the patients reasonably expected to receive the institutional health service will be individuals enrolled with such organization;
- (b) Requirements for an application for exemption.

 An application for an exemption from a certificate of need shall meet the following requirements:
- (i) The application for an exemption shall have been submitted at least thirty days prior to the offering of the institutional health service, acquisition of major medical equipment, or obligation of the capital expenditure to which the application pertains. A copy of the application for the exemption shall be sent simultaneously to the appropriate advisory review agencies.
- (ii) A complete application shall be submitted in such form and manner as has been prescribed by the department. The information which the department prescribes shall include:
- (A) All of the information required to make a determination that the applicant entity qualifies in accordance with subsection (1)(a) of this section; and
- (B) A complete description of the offering, acquisition, or obligation to which the application pertains.
 - (2) Action on an application for exemption.
- (a) Within thirty days after receipt of a complete application for exemption from certificate of need requirements, the department shall send the applicant a written notice the exemption has been granted or denied. A copy of such written notice shall be sent simultaneously to the appropriate advisory review agencies.
- (b) The secretary's designee shall deny an exemption if he or she finds the applicant has not met the requirements of subsections (1)(a) and (b) of this section. Written notice of the denial shall include the specific reasons for the denial.
- (c) In the case of an application for a proposed health care facility (or portion thereof) which has not begun to provide institutional health services on the date the application for an exemption is submitted, the secretary's designee shall grant the exemption if he or she determines the facility (or portion thereof) will meet the applicable requirements of subsection (1)(a) of this section when the facility first provides health services.
- (d) If the secretary's designee fails to grant or deny an exemption in accordance with the provisions of this section within thirty days after receipt of a complete application for such exemption, the applicant for the exemption may seek a writ of mandamus from superior court pursuant to chapter 7.16 RCW.
- (3) Subsequent sale, lease, or acquisition of exempt facilities or equipment.

Subsequent sale, lease, or acquisition of exempt health care facilities (or portions thereof) or medical equipment for which an exemption was granted under the provisions of subsection (2) of this section, any acquisition of a controlling interest in such facility or equipment, and any use of such facility or equipment by a person other than the one to whom the exemption was granted, shall meet one of the following conditions:

- (a) A certificate of need for the purchase, lease, acquisition of controlling interest in, or use of such facility or equipment, shall have been applied for and issued by the department; or
- (b) The department shall have determined, after receipt of an application for an exemption, submitted in accordance with subsection (1) of this section, that the requirements of either subsection (1)(a)(i) or subsection (1)(a)(ii)(A) and (B) are met.
- (4) The method of payment for services (i.e., prepaid or fee for service) shall not be considered relevant in determining whether an undertaking of a health maintenance organization qualifies for an exemption under this section.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86-06-030 (Order 2344), § 248-19-405, filed 2/28/86; 81-09-012 (Order 210), § 248-19-405, filed 4/9/81, effective 5/20/81.]

- WAC 246-310-050 Applicability determination. (1) Any person wanting to know whether an action the person is considering is subject to certificate of need requirements (chapter 248-19 WAC) should submit a written request to the certificate of need unit requesting a formal determination of applicability of the certificate of need requirements to the action.
- (a) A copy of a written request for determination of applicability shall be sent simultaneously to the appropriate advisory review agencies.
- (b) The written request shall be in a form prescribed by the department and contain an explicit description of the action. The description shall include the nature and extent of any construction, changes in services, and the estimated total costs of the action.
- (2) The department may request such additional written information as is reasonably necessary to make an applicability determination on the action.
- (3) The department shall respond in writing to a request for an applicability determination within thirty days of receipt of all the information needed for such determination. In the written response, the department shall state the reasons for its determination that the action is or is not subject to certificate of need requirements.
- (4) Information or advice given by the department as to whether an action is subject to certificate of need requirements shall not be considered an applicability determination unless it is in written form in response to a written request submitted in accordance with provisions of this section.
- (5) A written applicability determination on an action in response to a written request and based on written information shall be binding upon the department: *Provided*, The nature, extent, or cost of the action does not significantly change.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), § 248–19–240, filed 2/28/86; 81–09–012 (Order 210), § 248–19–240, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), § 248–19–240, filed 11/30/79.]

WAC 246-310-060 Sanctions for violations. The department may take or cause to be taken any action against a person who has failed to comply with certificate of need regulations which is provided for in RCW 70.38.125.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 81-09-012 (Order 210), § 248-19-250, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79-12-079 (Order 188), § 248-19-250, filed 11/30/79.]

WAC 246-310-070 Periodic reports on development of proposals. During January of each year, each health care facility and any other person developing proposals subject to certificate of need review shall submit to the department and the advisory review agencies a report describing each such undertaking. Such report shall be submitted in a form prescribed by the department.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), § 248–19–260, filed 2/28/86; 81–09–012 (Order 210), § 248–19–260, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), § 248–19–260, filed 11/30/79.]

WAC 246-310-080 Letter of intent. Any person planning to propose an undertaking subject to certificate of need review shall submit a letter of as follows:

- (1) A copy of the letter of intent shall include the following information:
- (a) A description of the extent of the services proposed;
 - (b) The estimated cost of the proposed project;
 - (c) A description of the service area.
- (d) Any person proposing an undertaking subject to certificate of need review shall send simultaneously a copy of the letter of intent to the regional health council or councils, if any, for the health service area or areas in which the project is to be located and, in the case of a hospital project, to the hospital commission.
- (e) The letter of intent shall not constitute "notice of intent" with respect to the acquisition of major medical equipment, as required by WAC 248-19-403.
- (2) Expedited or regular review. Any person proposing an undertaking subject to an expedited or regular review shall submit a letter of intent at least thirty days prior to the submission of the application.
 - (3) Concurrent review.
- (a) Any person proposing undertakings subject to concurrent review shall submit a letter of intent according to the applicable schedule.
- (b) Within thirty days following the last day of the letter of intent submittal period, the department, after consultation with the advisory review agencies, shall determine which of the proposed undertakings compete with other proposed undertakings. Two or more undertakings within the same concurrent review cycle may be competing when the proposed nursing home beds would be located in the same county or nursing home planning area and/or the undertakings propose nursing home beds to be allocated from the same statewide continuing care

retirement community (CCRC) bed pool as defined in WAC 248-19-373.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.115. 87–10–023 (Order 2487), § 248–19–270, filed 5/1/87. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), § 248–19–270, filed 2/28/86; 81–09–012 (Order 210), § 248–19–270, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), § 248–19–270, filed 11/30/79.]

WAC 246-310-090 Submission and withdrawal of applications. (1) General.

- (a) A person proposing an undertaking subject to review shall submit a certificate of need application in such form and manner and containing such information as the department, after consultation with the advisory review agencies, has prescribed and published as necessary to such a certificate of need application.
- (i) The information, which the department prescribes and publishes as required for a certificate of need application, shall be limited to the information necessary for the department to perform a certificate of need review and shall vary in accordance with and be appropriate to the category of review or the type of proposed project: *Provided however*, That the required information shall include that which is necessary to determine whether the proposed project meets applicable criteria and plan standards.
- (ii) Information regarding a certificate of need application submitted by an applicant after the department has given "notification of the beginning of review" in the manner prescribed by WAC 248–19–310 shall be submitted in writing to the department, the regional health council, and for hospital projects, to the hospital commission.
- (iii) Except as provided in WAC 248-19-325, no information regarding a certificate of need application submitted by an applicant after the conclusion of a public hearing conducted under the provisions of WAC 248-19-320 or the date of the final action of the appropriate regional health council or the date of the final action of the hospital commission on the application, whichever occurs last, shall be considered by the department in reviewing and taking action on a certificate of need application. An exception to this rule shall be made when, during its final review period, the department finds an unresolved pivotal issue requires submission of further information by an applicant and the applicant agrees to an extension of the review period in order to resolve this issue as provided for in WAC 248-19-330 (2)(b), 248-19-340 (2)(c), and 248-19-350(4). The department shall furnish copies of its request to the applicant for such additional information to the appropriate advisory review agencies. The department shall give public notice of such request for additional information through the same newspaper in which the "notification of beginning of review" for the project was published. The notice shall identify the project, the nature of the unresolved issue and the information requested of the applicant, and shall state the period of time allowed for receipt of written comments from interested persons.

- (b) A person submitting a certificate of need application shall simultaneously submit copies of such application to the certificate of need unit of the department and the appropriate advisory review agencies.
- (i) The original and two copies of the application shall be submitted to the certificate of need unit of the department.
- (ii) At least three and such additional copies of the application as may be required by the regional health council shall be submitted to the appropriate regional health council.
- (iii) For a hospital project, one copy shall be submitted to the hospital commission.
- (c) On or before the last day of the applicable screening period for a certificate of need application, as prescribed in subsections (2) and (3) of this section, the department shall send a written notice to the person submitting the application stating whether or not the application has been declared complete. If an application has been found to be incomplete, the notice from the department shall specifically identify the portions of the application in which the information provided has been found to be insufficient or indefinite and request the supplemental information needed to complete the application. The notice from the department shall incorporate the findings as to insufficient or indefinite application information transmitted to the department by the regional health council and the hospital commission.
- (d) The department shall not request any supplemental information of a type not prescribed and published as being necessary to a certificate of need application for the type of project being proposed. The department may request clarification of information provided in the application.
- (e) A response to the department's request for information to supplement an incomplete application shall be written and submitted to the same agencies and in the same numbers as required for an application under the provisions of subsection (1)(b) of this section.
 - (2) Screening and prereview activities.
- (a) The department and the appropriate advisory review agencies shall, within a fifteen-day period for emergency, expedited, and regular reviews, screen the application to determine whether the information provided in the application is complete and as explicit as is necessary for a certificate of need review. This screening period shall begin on the first day after which the department and the advisory review agencies have each received copies of the application.
- (b) The department shall return an incomplete certificate of need application to the person submitting the application if the department has not received a response to a request for the supplemental information sent in accordance with subsection (1)(c) of this section within forty-five days for emergency, expedited, and regular reviews and within one month for concurrent review after such request was sent.
- (c) For emergency, expedited, and regular reviews, a person submitting a response to the department's request for supplemental information to complete a certificate of need application within forty-five days after the request

- was sent by the department, in accordance with subsection (1)(c) of this section, shall have the right to exercise one of the following options:
- (i) Submission of written supplemental information and a written request that such information be screened and the applicant be given opportunity to submit further supplemental information if the application is still incomplete;
- (ii) Submission of written supplemental information with a written request that review of the certificate of need application begin without the department notifying the applicant as to whether the supplemental information is adequate to complete the application; or
- (iii) Submission of a written request that the incomplete application be reviewed without supplemental information.
- (d) For concurrent review a person submitting a response to the department's request for supplemental information to complete a certificate of need application within one month after the request was sent by the department, in accordance with subsection (1)(c) of this section, shall submit written supplemental information or a written request that the incomplete application be reviewed. The review shall begin in accordance with the published schedule.
- (e) After receipt of a request for review of a certificate of need application, submitted in accordance with subsection (2)(c)(ii) or (iii) of this section, the department shall give notification of the beginning of review in the manner prescribed for a complete application in WAC 248–19–310.
- (f) If a person requests the screening of supplemental information in accordance with subsection (2)(c)(i) of this section, such screening shall be carried out in the same number of days and in the same manner as reguired for an application in accordance with the provisions of subsection (1)(c) and (2)(a) of this section. The process of submitting and screening supplemental information may be repeated until the department declares the certificate of need application complete, the applicant requests that review of the incomplete application begin, or the one hundred twentieth day after the beginning of the first screening period for the application, whichever occurs first. The department shall return an application to the applicant if it is still incomplete on the one hundred twentieth day after the beginning of the first screening period and the applicant has not requested review of such incomplete application.
 - (3) Withdrawal of applications.
- A certificate of need application shall be withdrawn from the certificate of need process if the department receives a written request for withdrawal of the application from the person submitting the application at any time before final action on such application has been taken by the secretary's designee.
- (4) Resubmission of applications withdrawn or returned as incomplete.
- A submission of a new certificate of need application shall be required for a certificate of need review of any undertaking for which the department has returned an incomplete application in accordance with subsection

(2)(b) of this section, or for which a certificate of need application has been withdrawn in accordance with subsection (3) of this section. The content of the application should be updated as necessary before resubmission.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), § 248–19–280, filed 2/28/86; 81–09–012 (Order 210), § 248–19–280, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), § 248–19–280, filed 11/30/79.]

- WAC 246-310-100 Amendment of certificate of need applications. (1) The following changes to an application may be considered an amendment of an application:
- (a) The addition of a new service or elimination of a service included in the original application.
- (b) The expansion or reduction of a service included in the original application.
 - (c) An increase in the bed capacity.
- (d) A change in the capital cost of the project or the method of financing the project.
- (e) A substantial change in the rationale used to justify the project.
- (2) Direct responses to screening questions will not be considered amendments.
- (3) Amendments to certificate of need applications shall include information and documentation consistent with the requirements of WAC 248-19-280 (1)(a)(i) and (b).
- (4) Application for emergency review. If an applicant amends an application during the screening period, the department, after consultation with the advisory review agencies, shall determine whether the amended application constitutes a new application. An application amended during the review period shall be considered a new application.
- (5) An application for expedited or regular review may be amended during the screening period or the advisory review period.
- (a) The advisory review agency recommends to the department that a change to an application constitutes an amendment. When the advisory agency recommends an application has been amended, a written justification shall be submitted to the applicant and the department within five working days after the recommendation is made. The applicant may submit written information to the department within five working days indicating why the change should not be considered an amendment. The applicant shall also submit the written information to the advisory agency.
- (b) The department shall determine within five working days of receipt of the advisory agency recommendation concerning an amendment whether the change constitutes an amendment to an application.
- (c) When an application has been amended, the review period may be extended at the written request of the advisory review agency for a period not to exceed forty-five days.
- (6) An application for concurrent review may be amended according to the following provisions:

- (a) The department, in consultation with the advisory review agency, shall determine when an application has been amended.
- (b) An amendment may be made through the first forty-five days of the concurrent review process. When an applicant amends an application, the review period for all applications reviewed concurrently shall be extended by a single thirty-day period. The forty-five days for amendments shall be divided as follows:
- (i) During the first thirty days an applicant or applicants may amend an application one or more times.
- (ii) When an amendment has been made to an application in the first thirty days, all applicants may make one final amendment during the remaining fifteen days of the forty-five day period.
- (iii) The department shall send written notice to all applicants when an amendment to an application is submitted.
- (iv) If no amendment has been made to any application through the thirty-day period, no amendments may be made during the subsequent fifteen-day period.
- (c) Any information submitted after the amendment period which has not been requested in writing by the department shall be returned to the person submitting the information and shall not be considered in the review of the application.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), § 248–19–295, filed 2/28/86.]

WAC 246-310-110 Categories of review. (1) In the review of any certificate of need application, one of the following review processes shall be used: Regular review, concurrent review, emergency review, expedited review, or administrative review.

(2) Determination of review process.

The department, after any necessary consultation with the appropriate advisory review agencies, shall determine which review process will be used in the review of a given certificate of need application.

- (a) Administrative review.
- (i) The secretary's designee shall have the authority to review an abbreviated application proposing the obligation of any capital expenditure by or on behalf of a health care facility decreasing the total number of licensed beds or relocating licensed beds from one facility to another, by ten beds or ten percent, whichever is less, in any two—year period. Prior to making a determination of administrative review, the secretary's designee shall consult with the advisory review agencies.
- (ii) An abbreviated application shall be submitted in a form acceptable to the secretary's designee in accordance with the provisions of WAC 248-19-280 (1)(b).
- (iii) Such review shall be completed within ten working days after receipt of an application.
 - (b) Emergency review.
- (i) Beginning January 1, 1981, an emergency review may, with the written consent of the appropriate advisory review agencies, be conducted when an immediate capital expenditure is required in order for a health care

facility to maintain or restore basic and essential patient services.

- (ii) The department may, after consulting with the appropriate advisory review agencies, determine an application submitted for emergency review does not qualify for such review. Such a determination and notification to the applicant shall be made within five days after receipt of the application. When the department makes a determination an application is not subject to emergency review procedures, the application will be reviewed under another review process appropriate for the type of undertaking proposed. The department will notify the applicant of the other process under which the application will be reviewed.
 - (c) Expedited review.

Beginning July 24, 1983, an expedited review shall be conducted on a certificate of need application for the following:

- (i) Projects proposed for the correction of deficiencies as described in WAC 248-19-415, except projects for the repair to or correction of deficiencies in the physical plant necessary to maintain state licensure, which are exempt from review by the provisions of WAC 248-19-230(12), if they do not substantially affect patient charges.
- (ii) The replacement of equipment having similar functional capability and not resulting in the offering or development of any new health services.
- (iii) Demonstration or research projects: *Provided*, That such projects do not involve a change in bed capacity or the provision of a new institutional health service.
 - (iv) Acquisition of an existing health care facility.
 - (v) Projects limited to predevelopment expenditures.
 - (d) Regular review process.

The regular review process shall be used for any application unless the department has determined the emergency, expedited, or concurrent review process will be used in the review of such application. The regular review process will also be used to review applications for projects solely for the purposes listed in WAC 248–19–230(12) determined by the department to substantially affect patient charges, unless the project qualifies for an expedited review under subsection (2)(b)(i) of this section.

(e) Concurrent review process.

The concurrent review process shall be used for all applications determined to be competing in accordance with WAC 248-19-327.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86-06-030 (Order 2344), § 248-19-300, filed 2/28/86; 81-09-012 (Order 210), § 248-19-300, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79-12-079 (Order 188), § 248-19-300, filed 11/30/79.]

WAC 246-310-120 Concurrent review process. (1) Projects for which the department may establish concurrent review schedules are identified in RCW 70.38.115(7). An annual concurrent review has been scheduled for competing projects proposing:

- (a) New nursing homes,
- (b) Nursing home bed additions,
- (c) The redistribution of beds from the following facility and service categories to skilled nursing facility beds:
 - (i) Acute care,
 - (ii) Boarding home, or
 - (iii) Intermediate care for the mentally retarded, or
- (d) The redistribution of beds from the following facility and service categories to intermediate care facility beds:
 - (i) Acute care, or
 - (ii) Boarding home, and
- (e) The relocation of nursing home beds from one county or nursing home planning area to another county or nursing home planning area.
- (2) Procedures for the concurrent review process shall be as follows:
 - (a) Submittal of initial applications.
- (i) Each applicant shall submit simultaneously copies of the application to each reviewing agency.
- (ii) Each applicant if requested in writing shall provide a copy of his or her application to the applicant of each other competing application.
 - (b) Screening of the initial applications.
- (i) The department and the appropriate advisory agencies shall screen each initial application during the screening period of the applicable concurrent review cycle schedule.
- (ii) The screening period shall begin on the first work day following the last day of the initial application submittal period for the applicable concurrent review cycle schedule.
- (iii) The department by the end of the screening period of the applicable concurrent review cycle schedule shall send a written request for supplemental information to each applicant.
- (iv) Each applicant by the end of the final application submittal period shall respond to the department's written request for supplemental information in one of the following ways:
- (A) Submitting the requested written supplemental information, or
- (B) Submitting a written request that the incomplete application be reviewed without supplemental information.
 - (c) Reviewing of final applications.
- (i) The department shall commence the review of competing applications on the date prescribed for the applicable concurrent review cycle schedule.
- (ii) The total number of days in the advisory and final review periods shall not exceed one hundred and thirty—five, unless extended in accordance with subsection (2)(d) of this section.
- (iii) The appropriate advisory review agencies shall submit written findings and recommendations on each competing application to the department within ninety days from the beginning of the advisory review period, unless the advisory review period is extended in accordance with subsection (2)(d) of this section.

- (iv) The department shall conclude its final review and the secretary's designee shall take action on a certificate of need application within forty—five days after the end of the advisory review agencies' review period, unless extended in accordance with subsection (2)(d) of this section.
 - (d) Extending review of final applications.
- (i) The advisory review period shall be extended in accordance with the provisions of WAC 248-19-295(6).
- (ii) The final review period may be extended by the department under the following provisions:
- (A) The department informs each applicant of the competing applications of the existence of an unresolved pivotal issue.
- (B) The department may make a written request for additional information from one or more of the applicants of the competing applications.
- (C) The department shall specify in the written request a deadline for receipt of written responses.
- (D) Each applicant receiving such written request may provide a written response within the specified deadline.
- (E) The department may extend the final review period for all competing applications up to thirty days after the receipt of the last response to the department's request for additional information or after the specified deadline, whichever occurs first.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-120, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.115. 87-10-023 (Order 2487), § 248-19-327, filed 5/1/87. Statutory Authority: RCW 70.38.135. 86-06-030 (Order 2344), § 248-19-327, filed 2/28/86.]

WAC 246-310-130 Nursing home concurrent review cycles. (1) The department shall review concurrently during review cycles established under subsection (6) of this section the following:

(a) New nursing homes,

(b) Nursing home bed additions, or

- (c) Redistribution of beds from the following facility or service categories to skilled nursing care beds:
 - (i) Acute care,
 - (ii) Boarding home care, or
 - (iii) Intermediate care for the mentally retarded; or
- (d) Redistribution of beds from the following facility or service categories to intermediate care facility beds:
 - (i) Acute care, or
 - (ii) Boarding home care.
- (2) Undertakings of type A continuing care retirement communities (CCRCs), as defined in subsection (3)(b)(i) of this section which do not propose or are not operating within a transition period as defined in subsection (3)(d) of this section during development, and which meet the following conditions, shall be reviewed under the regular review process per WAC 248-19-330:
- (a) The number of nursing home beds requested in a single undertaking shall not exceed sixty; and
- (b) After project completion, the number of nursing home beds, including those with which the CCRC contracts, shall not exceed one bed for each four independent living units within the CCRC. In computing this ratio, only independent living units of the CCRC already

existing, and/or scheduled for completion at the same time as the proposed nursing home beds under the same financial feasibility plan, shall be counted.

- (3) For purposes of this section, the following definitions shall be used:
- (a) "Continuing care contract" means a contract to provide a person, for the duration of the person's life or for a term in excess of one year, shelter along with nursing, medical, health-related, or personal care services, in exchange for payment of an entrance fee, periodic charges, or both. Continuing care contracts include, but are not limited to, life care agreements and mutually terminable contracts. The living space and services under a continuing care contract may or may not be provided at the same location.
- (b) "Continuing care retirement community (CCRC)" means any of a variety of entities providing shelter and services based on continuing care contracts with its enrollees. CCRCs are categorized as follows:
- (i) "Type A CCRC" means a CCRC meeting the following requirements:
- (A) Maintains for a period in excess of one year a CCRC contract with its enrollees or residents for a contractually guaranteed range of services from independent living through nursing home care, including some form of assistance with activities of daily living;
- (B) Continues a contract if an enrollee or resident is no longer able to pay for services;
- (C) Offers services only to contractual enrollees with limited exception related to use of transition periods; and
- (D) Prohibits Medicaid program liability for costs of care even if the member depletes his or her personal resources.
- (ii) "Type B CCRC" means a CCRC meeting the following requirements:
- (A) Maintains for a period in excess of one year a CCRC contract with its enrollees or residents,
- (B) May provide a range of services beyond nursing home care,
- (C) May terminate a contract if an enrollee or resident is unable to pay for services,
- (D) May admit patients to the nursing home who are not CCRC enrollees or residents, and
- (E) May maintain Medicaid contracts and/or other requirements for third-party payment.
- (c) "Enrollee" of a CCRC means an individual who has signed a continuing care contract with a CCRC.
- (d) "Transition period" means a period of time, not exceeding five years, between the date an enrollee becomes the first resident of a type A CCRC and the date it fully meets the requirements of a type A CCRC as contained in the current state health plan.
- (4) The annual nursing home concurrent review consists of the following cycles:
- (a) One of the annual cycles is reserved for the review of competing applications submitted by or on behalf of:
- (i) Type A CCRCs applying for nursing home beds available from the statewide CCRC allotment as described in WAC 248-19-373(8);
- (ii) Type A CCRCs which propose or are operating within a transition period during development and are

not applying for nursing home beds available from any nursing home planning area; and

- (iii) Type B CCRCs applying for nursing home beds available from the statewide CCRC allotment as described in WAC 248-19-373(8).
- (b) Two other cycles are for review of competing applications for nursing home beds needed in half of the nursing home planning areas; and
- (c) Until whichever occurs first, December 31, 1990, or issuance of a certificate of need for all or part of those available beds, one cycle is reserved for the review of competing applications submitted for nursing home beds available from the King County AIDS nursing home bed allotment established under WAC 248–19–373(9).
- (5) The department shall use the following nursing home concurrent review application filing procedures:
 - (a) Each applicant shall:
- (i) File the required number of copies of each application as specified in the application information requirements, and
- (ii) Mail or deliver the application so that the department receives it no later than the last day for initial application receipt as prescribed in the schedule for that concurrent review cycle.
 - (b) The department shall:
- (i) Only review applications for which a letter of intent, as described in WAC 248-19-270, was mailed or delivered to the department before the last day for receipt of letters of intent as indicated below;
- (ii) Begin screening all applications received during the initial application period on the first working day following the close of that period; and
- (iii) Return to the applicant any application received after the last day of the initial application receipt period.
- (6) The schedules for the annual nursing home bed concurrent review cycles shall be as follows:
- (a) For those applications described in subsection (4)(a) of this section, the concurrent review cycle schedule shall be as follows:
- (i) Period for receipt of letters of intent shall begin on the first working day of June and end on the first working day of July,
- (ii) Period for receipt of initial applications shall begin on the first working day of July and end on the first working day of August,
- (iii) End of initial application completeness screening period is the first working day of September,
- (iv) End of final application receipt period is the first working day of October, and
- (v) Beginning of concurrent review period is October 16 or first working day after that date.
- (b) For competing applications submitted for nursing home beds available for the Chelan/Douglas, Clallam, Clark/Skamania, Cowlitz, Grant, Grays Harbor, Island excluding Camano, Jefferson, King, Kittitas, Klickitat, Okanogan, Pacific, San Juan, Skagit, Spokane, and Yakima nursing home planning areas, the concurrent review cycle schedule shall be as follows:

- (i) Period for receipt of letters of intent shall begin on the first working day of July and end on the first working day of August,
- (ii) Period for receipt of initial applications shall begin on the first working day of August and end on the first working day of September,
- (iii) End of initial application completeness screening period is the first working day of October,
- (iv) End of final application receipt period is the first working day of November, and
- (v) Beginning of concurrent review period is November 16 or first working day after that date.
- (c) For competing applications submitted for nursing home beds available for the Adams, Asotin, Benton, Columbia, Ferry, Franklin, Garfield, Kitsap, Lewis, Lincoln, Mason, Pend Oreille, Pierce, Snohomish including Camano, Stevens, Thurston, Wahkiakum, Walla Walla, Whatcom, and Whitman nursing home planning areas, the concurrent review cycle schedule shall be as follows:
- (i) Period for receipt of letters of intent shall begin on the first working day of August and end on the first working day of September,
- (ii) Period for receipt of initial applications shall begin on the first working day of September and end on the first working day of October,
- (iii) End of initial application completeness screening period is the first working day of November,
- (iv) End of final application receipt period is the first working day of December, and
- (v) Beginning of concurrent review period is December 16 or first working day after that date.
- (d) For those applications described in subsection (4)(c) of this section, the concurrent review cycle shall be as follows:
- (i) Period for receipt of letters of intent shall begin on February 17, 1989, and end on March 3, 1989;
- (ii) Period of receipt of initial applications shall begin on March 6, 1989, and end on March 20, 1989;
- (iii) End of initial application completeness screening period is April 3, 1989;
- (iv) End of final application receipt period is April 17, 1989;
- (v) Beginning of concurrent review period is April 17, 1989:
- (vi) End of the advisory review period is June 16, 1989; and
 - (vii) End of the final review period is July 14, 1989.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–130, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.115. 88–24–026 (Order 2736), § 248–19–328, filed 12/2/88. Statutory Authority: RCW 70.38.115 and 70.38.135. 88–04–047 (Order 2591), § 248–19–328, filed 1/29/88. Statutory Authority: RCW 70.38.115. 87–10–023 (Order 2487), § 248–19–328, filed 5/1/87.]

WAC 246-310-140 Emergency review process. (1) The emergency review process shall not exceed fifteen working days from the beginning of the review period.

(2) Written findings and written recommendations of the advisory review agencies shall be submitted to the department within ten working days after the beginning of the emergency review period.

- (3) The department shall complete its final review and the secretary's designee shall make his or her decision on an emergency certificate of need application within fifteen working days after the beginning of the review period unless the department extends its final review period in accordance with the provisions of subsection (4) of this section.
- (4) If an issue, which is pivotal to the decision of the secretary's designee remains unresolved, the department may make one request for additional information from the person submitting the application. The department may extend its final emergency review period up to but not exceeding ten days after receipt of the applicant's written response to the department's request for information.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-140, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86-06-030 (Order 2344), § 248-19-350, filed 2/28/86; 82-19-055 (Order 244), § 248-19-350, filed 9/15/82; 81-09-012 (Order 210), § 248-19-350, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79-12-079 (Order 188), § 248-19-350, filed 11/30/79.]

WAC 246-310-150 Expedited review process. (1) The expedited review process shall not exceed fifty days from the beginning of the review period unless extended in accordance with the provisions of subsection (2) of this section: Provided however, That the appropriate regional health council consents in writing to a thirty-day review period. If the regional health council does not consent to a thirty-day review period, the expedited review process shall not exceed eighty days from the beginning of the review period.

- (a) If the advisory agencies' review period is thirty days, advisory review agencies shall submit written findings and recommendations to the department within thirty days of the beginning of the review period. If the advisory agencies' review period is sixty days, the advisory review agencies shall submit written findings and recommendations to the department within sixty days of the beginning of the review period.
- (b) The department shall complete its final review and the secretary's designee shall make his or her decision on a certificate of need application under an expedited review within twenty days of the end of the review period or extended review period of the advisory review agencies.
- (2) The review period for an expedited review may be extended according to the following provisions:
- (a) If the regional health council has consented to a thirty-day review period, the review period may be extended for up to an additional thirty days upon the written request of the advisory review agency when additional time is needed by the advisory review agency, to complete the review and submit written findings and recommendations to the department and/or up to an additional forty-five days in accordance with WAC

- 248-19-295. The department may grant further extensions to this review period: *Provided*, The person submitting the certificate of need application gives written consent to further extension.
- (b) If an issue, which is pivotal to the decision of the secretary's designee remains unresolved, the department may make one request for additional information from the person submitting the application. The department may extend its final expedited review period up to but not exceeding thirty days after receipt of the applicant's written response to the department's request for information.
- (c) The department may extend either the expedited review period for the advisory review agencies or the department's final review period upon receipt of a written request of the person submitting the application: *Provided however*, That such an extension shall not exceed sixty days.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–150, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), § 248–19–340, filed 2/28/86; 82–19–055 (Order 244), § 248–19–340, filed 9/15/82; 81–09–012 (Order 210), § 248–19–340, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), § 248–19–340, filed 11/30/79.]

- WAC 246-310-160 Regular review process. (1) The regular review process shall not exceed ninety days from the beginning of the review period and shall be conducted in accordance with this section unless the review period is extended in accordance with the provisions of subsection (2) of this section.
- (a) Within sixty days from the first day of the review period, the advisory review agencies shall submit written findings and recommendations on a certificate of need application to the department unless either of the advisory review agencies has requested and received an extension of this review period from the department.
- (b) The department shall complete its final review and the secretary's designee shall make a decision on a certificate of need application within thirty days of the end of the review period or extended review period of the advisory review agencies.
- (2) The review period for a regular review may be extended according to the following provisions:
- (a) The advisory agencies' review period may be extended for up to an additional thirty days upon the written request of either of the advisory review agencies when such additional time is needed to complete the review and submit written findings and recommendations to the department and/or up to an additional forty-five days in accordance with WAC 248-19-295. The department may grant further extensions to this review period: *Provided*, The person submitting the certificate of need application gives written consent to such further extensions.
- (b) If an issue, which is pivotal to the decision of the secretary's designee remains unresolved, the department may make one request for additional information from the person submitting the application. The department

may extend its final review period up to but not exceeding thirty days after receipt of the applicant's written response to the department's request for information.

(c) The department may extend either the review period for the advisory review agencies or the department's final review period upon receipt of a written request of the person submitting the application: *Provided however*, That such an extension shall not exceed ninety days.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–160, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), § 248–19–330, filed 2/28/86; 82–19–055 (Order 244), § 248–19–330, filed 9/15/82; 81–09–012 (Order 210), § 248–19–330, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), § 248–19–330, filed 11/30/79.]

WAC 246-310-170 Notification of beginning of review. (1) Notice required.

The department shall provide written notification of the beginning of the review of a certificate of need application and notification of the beginning of the review of a proposed withdrawal of a certificate of need to affected persons (other than persons residing within the geographic area served or to be served by the applicant, any persons regularly using health care facilities within that geographic area, and third-party payers reimbursing health care facilities for services in the health service area in which the project is proposed to be located), and any other person submitting a written request that the person's name be on the mailing list for such notice. Notification of the beginning of the review of a certificate of need application shall be provided to persons residing within the geographic area served or to be served by the applicant, to any person regularly using health care facilities within that geographic area, and thirdparty payers reimbursing health care facilities for services in the health service area in which the project is proposed to be located, through a newspaper of general circulation in the health service area of the project.

- (2) Specific notice requirements.
- (a) The department shall give "notification of the beginning of review" of an application after the department and the appropriate advisory review agencies have each received a complete application or the applicant's request, submitted in accordance with WAC 248-19-280 (2)(c), that review of the application begin. Such notice shall be given according to the following requirements:
 - (i) Emergency review.

When an application is being reviewed under the emergency review process, required notices shall be given within five working days following the receipt of a complete application or the applicant's written request that review of the application begin.

(ii) Expedited and regular review.

When an application is being reviewed under the expedited or regular review process, required notices shall be given within five working days of a declaration that the application is complete or the applicant's request that review of the application begin.

- (b) The department shall give notification of the beginning of the review of a proposed withdrawal of a certificate of need when the department determines there may be good cause to withdraw a certificate of need.
 - (c) The notices shall include:
 - (i) A general description of the project;
- (ii) In the case of a proposed withdrawal of a certificate of need, the reasons for the proposed withdrawal;
 - (iii) The proposed review schedule;
- (iv) The period within which one or more affected persons may request the conduct of a public hearing during the review;
- (v) The name and address of the agency to which a request for a public hearing should be sent;
- (vi) The manner in which notification will be provided of the time and place of any hearing so requested;
- (vii) Notice that any affected person wishing to receive notification of a meeting on the application called by the department after the end of the advisory agencies review period shall submit a written request to the department to receive notification of such meetings; and
- (viii) The period within which any affected person may request notification of the meetings referenced in subsection (2)(c)(vii) of this section.
- (d) The notices to other affected persons shall be mailed on the same date the notice to the public is mailed to the newspaper for publication.
 - (3) Beginning of review.
- (a) Review of a certificate of need application under the expedited or regular review process shall begin on the day the department sends notification of the beginning of review to the general public and other affected persons unless the department has received a written request from the applicant pursuant to WAC 248-19-280 (2)(c)(iii), in which case review shall begin upon receipt of such request.
- (b) Review of certificate of need applications under the concurrent review process shall begin fifteen days after the conclusion of the published time period for the submission of final applications subject to concurrent review.
- (c) Review of a certificate of need application under emergency review shall begin on the first day after the date on which the department and the appropriate advisory review agencies have determined the application is complete, or have each received a written request to begin review submitted by the applicant in accordance with WAC 248–19–280 (2)(c).
- (d) Review of a proposed withdrawal of a certificate of need shall begin on the day the department sends notification of the beginning of review to the general public and to other affected persons.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \$ 246–310–170, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), \$ 248–19–310, filed 2/28/86; 81–09–012 (Order 210), \$ 248–19–310, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), \$ 248–19–310, filed 11/30/79.]

WAC 246-310-180 Public hearings. (1) "Opportunity for a public hearing," as used in this section, shall

mean a public hearing will be conducted if a valid request for such a hearing has been submitted by one or more affected persons.

- (2) The department shall provide opportunity to affected persons for a public hearing on:
- (a) A certificate of need application which is under review, unless the application is being reviewed according to the emergency or expedited review processes; and
 - (b) The proposed withdrawal of a certificate of need.

This requirement for a public hearing shall be satisfied if the appropriate regional health council has provided opportunity for such a public hearing to "affected persons" as this term is defined in WAC 248–19–220: Provided however, That the department has delegated the responsibility for such hearing to the appropriate regional health council, and such regional health council has followed public hearing procedures required under the provisions of this section.

- (3) To be valid, a request for a public hearing on a certificate of need application or on the proposed withdrawal of a certificate of need shall:
 - (a) Be submitted in writing;
- (b) Be received by the agency identified in the "notification of beginning of review" within fifteen days after the date on which the department's "notification of beginning of review" for the particular certificate of need application or proposed withdrawal of a certificate of need was published in a newspaper of general circulation; and
- (c) Include identification of the particular certificate of need application or proposed certificate of need withdrawal for which the public hearing is requested and the full name, complete address, and signature of the person making the request.
- (4) The department or the regional health council to which the department delegated responsibility for public hearings shall give written notice of a public hearing conducted pursuant to this section.
- (a) Written notice shall be given to affected persons and the public at least fifteen days prior to the beginning of the public hearing.
- (b) The notices shall include: Identification of the certificate of need application or certificate of need on which the public hearing is to be conducted and the date, time, and place of the public hearing.
- (c) Notice to the general public to be served by the proposed project to which the certificate of need application or certificate of need pertains shall be through a newspaper of general circulation in the health service area of the proposed project. The notices to other affected persons shall be mailed on the same date the notice to the public is mailed to the newspaper for publication.
- (5) In a public hearing on a certificate of need application or on a proposed withdrawal of a certificate of need, any person shall have the right to be represented by counsel and to present oral or written arguments and evidence relevant to the matter which is the subject of the hearing. Any person affected by the matter may conduct reasonable questioning of persons who make relevant factual allegations.

- (6) The department or regional health council, whoever conducts the hearing, shall maintain a verbatim record of a public hearing and shall not impose fees for the hearing.
- (7) The department shall not be required to conduct a public hearing on a certificate of need application being reviewed according to the emergency or expedited review procedures.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–180, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), § 248–19–320, filed 2/28/86; 81–09–012 (Order 210), § 248–19–320, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), § 248–19–320, filed 11/30/79.]

WAC 246-310-190 Ex parte contacts. (1) There shall be no ex parte contacts as defined in WAC 248-19-220(17) after whichever of the following occurs last:

- (a) The conclusion of a public hearing held in accordance with WAC 248-19-320, or
- (b) The final action of the appropriate regional health council, or
 - (c) The final action of the hospital commission.
- (2) Any of the following communications shall not be considered ex parte contacts:
- (a) A communication regarding the procedure or process of the review.
- (b) A communication made in a meeting open to the public requested by the department and reasonable notice of the meeting has been given to the applicant, the advisory review agencies, all applicants in a concurrent review, and all persons having previously requested in writing to be notified of all such meetings or written requests for information concerning a specific application for certificate of need or a specific proposed withdrawal of a certificate of need.
- (c) A written request for information made by the department and provided to all persons specified in subsection (2)(b) of this section.
- (d) A response to a request made by the department in a meeting held in accordance with subsection (2)(b) of this section or in response to subsection (2)(c) of this section, and submitted to the department and to all persons specified in subsection (2)(b) of this section.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–190, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), § 248–19–326, filed 2/28/86.]

WAC 246-310-200 Bases for findings and action on applications. (1) The findings of the department's review of certificate of need applications and the action of the secretary's designee on such applications shall, with the exceptions provided for in WAC 248-19-410 and 248-19-415 be based on determinations as to:

- (a) Whether the proposed project is needed;
- (b) Whether the proposed project will foster containment of the costs of health care;
- (c) Whether the proposed project is financially feasible; and

- (d) Whether the proposed project will meet the criteria for structure and process of care identified in WAC 248-19-390.
- (2) The decision on a certificate of need application shall be consistent with the state health plan in effect at the time the secretary's designee made the original or reconsidered or remanded decision. A finding of inconsistency shall not be based solely on the fact a proposed project is not specifically referenced in the state health plan.
- (3) Criteria contained in this section and in WAC 248-19-370, 248-19-380, 248-19-390, and 248-19-400 shall be used by the department in making the required determinations.
- (a) In the use of criteria for making the required determinations, the department shall consider:
- (i) The consistency of the proposed project with the applicable regional health plan (RHP) and annual implementation plan (AIP), and the state health plan (SHP);
- (ii) The standards in the state health plan identified to be used for certificate of need review purposes and applicable to the type of project under review;
- (iii) In the event standards in the state health plan or regional health plan do not address in sufficient detail for a required determination the services or facilities for health services proposed, the department may consider standards not in conflict with the state health plan or regional health plan in accordance with subsection (3)(b) of this section;
- (iv) The findings and recommendations of the regional health council and the hospital commission (in relation to the immediate and long-range financial feasibility of a hospital project as well as the probable impact of such project on the cost of and charges for providing health services by the hospital, including recommendations to approve, conditionally approve, partially approve, or deny an application); and
- (v) The relationship of the proposed project to the long-range plan (if any) of the person proposing the project.
- (b) The department may consider any of the following in its use of criteria for making the required determinations:
- (i) Nationally recognized standards from professional organizations;
- (ii) Standards developed by professional organizations in Washington state;
- (iii) Federal Medicare and Medicaid certification requirements;
 - (iv) State licensing regulations;
- (v) The hospital commission's policies, guidelines and regulations;
- (vi) Applicable standards developed by other individuals, groups, or organizations with recognized expertise related to a proposed undertaking; and
- (vii) The written findings and recommendations of individuals, groups, or organizations with recognized expertise related to a proposed undertaking, with whom the department consults during the review of an application.

- (c) At the request of an applicant, the department shall identify the criteria and standards it will use prior to the submission and screening of a certificate of need application: Provided however, That when a person requests identification of criteria and standards prior to the submission of an application, the person shall submit such descriptive information on a project as is determined by the department to be reasonably necessary in order to identify the applicable criteria and standards. The department shall respond to such request within fifteen working days of its receipt. In the absence of an applicant's request under this subsection, the department shall identify the criteria and standards it will use during the screening of a certificate of need application. The department shall inform the applicant about any consultation services it will use in the review of a certificate of need application prior to the use of such consultation services.
- (d) Representatives of the department or consultants whose services are engaged by the department may make an on-site visit to a health care facility, or other place for which a certificate of need application is under review, or for which a proposal to withdraw a certificate of need is under review when the department deems such an on-site visit is necessary and appropriate to the department's review of a proposed project.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–200, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 85–05–032 (Order 2208), § 248–19–360, filed 2/15/85; 81–09–012 (Order 210), § 248–19–360, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), § 248–19–360, filed 11/30/79.]

- WAC 246-310-210 Determination of need. The determination of need for any project shall be based on the following criteria, except these criteria will not justify exceeding the limitation on increases of nursing home beds provided in WAC 248-19-373.
- (1) The population served or to be served has need for the project and other services and facilities of the type proposed are not or will not be sufficiently available or accessible to meet that need. The assessment of the conformance of a project with this criterion shall include, but need not be limited to, consideration of the following:
- (a) In the case of a reduction, relocation, or elimination of a service, the need the population presently served has for the service, the extent to which the need will be met adequately by the proposed relocation or by alternative arrangements, and the effect of the reduction, elimination, or relocation of the service on the ability of low-income persons, racial and ethnic minorities, women, handicapped persons, and other underserved groups and the elderly to obtain needed health care;
- (b) In the case of health services or facilities proposed to be provided, the efficiency and appropriateness of the use of existing services and facilities similar to those proposed;
- (c) In the case of an application by an osteopathic or allopathic facility for a certificate of need to construct, expand, or modernize a health care facility, acquire major medical equipment, or add services, the need for that

construction, expansion, modernization, acquisition of equipment, or addition of services on the basis of the need for and the availability in the community of services and facilities for osteopathic and allopathic physicians and their patients, and the impact on existing and proposed institutional training programs for doctors of osteopathy and medicine at the student, internship, and residency training levels; and

- (d) In the case of a project not involving health services, the contribution of the project toward overall management and support of such services.
- (2) All residents of the service area, including low-income persons, racial and ethnic minorities, women, handicapped persons, and other underserved groups and the elderly are likely to have adequate access to the proposed health service or services. The assessment of the conformance of a project with this criterion shall include, but not be limited to, consideration as to whether the proposed services makes a contribution toward meeting the health-related needs of members of medically underserved groups which have traditionally experienced difficulties in obtaining equal access to health services, particularly those needs identified in the applicable regional health plan, annual implementation plan, and state health plan as deserving of priority. Such consideration shall include an assessment of the following:
- (a) The extent to which medically underserved populations currently use the applicant's services in comparison to the percentage of the population in the applicant's service area which is medically underserved, and the extent to which medically underserved populations are expected to use the proposed services if approved;
- (b) The past performance of the applicant in meeting obligations, if any, under any applicable federal regulations requiring provision of uncompensated care, community service, or access by minorities and handicapped persons to programs receiving federal financial assistance (including the existence of any unresolved civil rights access complaints against the applicant);
- (c) The extent to which Medicare, Medicaid, and medically indigent patients are served by the applicant; and
- (d) The extent to which the applicant offers a range of means by which a person will have access to its services (e.g., outpatient services, admission by house staff, admission by personal physician).
- (3) The resources for the proposed project are not needed for higher priority alternative uses identified in applicable health plans.
- (4) The applicant has substantiated any of the following special needs and circumstances the proposed project is to serve.
- (a) The special needs and circumstances of entities such as medical and other health professions schools, multidisciplinary clinics and specialty centers providing a substantial portion of their services or resources, or both, to individuals not residing in the health service areas in which the entities are located or in adjacent health service areas.

- (b) The special needs and circumstances of biomedical and behavioral research projects designed to meet a national need and for which local conditions offer special advantages.
- (c) The special needs and circumstances of osteopathic hospitals and nonallopathic services.
- (5) The project will not have an adverse effect on health professional schools and training programs. The assessment of the conformance of a project with this criterion shall include consideration of:
- (a) The effect of the means proposed for the delivery of health services on the clinical needs of health professional training programs in the area in which the services are to be provided; and
- (b) If proposed health services are to be available in a limited number of facilities, the extent to which the health professions schools serving the area will have access to the services for training purposes.
- (6) The project is needed to meet the special needs and circumstances of enrolled members or reasonably anticipated new members of a health maintenance organization or proposed health maintenance organization and the services proposed are not available from nonhealth maintenance organization providers or other health maintenance organizations in a reasonable and cost—effective manner consistent with the basic method of operation of the health maintenance organization or proposed health maintenance organization. In assessing the availability of health services from these providers, the department shall consider only whether the services from these providers:
- (a) Would be available under a contract of at least five years' duration;
- (b) Would be available and conveniently accessible through physicians and other health professionals associated with the health maintenance organization or proposed health maintenance organization (for example whether physicians associated with the health maintenance organization have or will have full staff privileges at a nonhealth maintenance organization hospital);
- (c) Would cost no more than if the services were provided by the health maintenance organization or proposed health maintenance organization; and
- (d) Would be available in a manner administratively feasible to the health maintenance organization or proposed health maintenance organization.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-210, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 85-05-032 (Order 2208), § 248-19-370, filed 2/15/85; 81-09-012 (Order 210), § 248-19-370, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79-12-079 (Order 188), § 248-19-370, filed 11/30/79.]

- WAC 246-310-220 Determination of financial feasibility. The determination of financial feasibility of a project shall be based on the following criteria.
- (1) The immediate and long-range capital and operating costs of the project can be met.
- (2) The costs of the project, including any construction costs, will probably not result in an unreasonable impact on the costs and charges for health services.
 - (3) The project can be appropriately financed.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-220, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.38 RCW. 79-12-079 (Order 188), § 248-19-380, filed 11/30/79.]

- WAC 246-310-230 Criteria for structure and process of care. A determination that a project fosters an acceptable or improved quality of health care shall be based on the following criteria.
- (1) A sufficient supply of qualified staff for the project, including both health manpower and management personnel, are available or can be recruited.
- (2) The proposed service(s) will have an appropriate relationship, including organizational relationship, to ancillary and support services, and ancillary and support services will be sufficient to support any health services included in the proposed project.
- (3) There is reasonable assurance that the project will be in conformance with applicable state licensing requirements and, if the applicant is or plans to be certified under the Medicaid or Medicare program, with the applicable conditions of participation related to those programs.
- (4) The proposed project will promote continuity in the provision of health care, not result in an unwarranted fragmentation of services, and have an appropriate relationship to the service area's existing health care system.
- (5) There is reasonable assurance that the services to be provided through the proposed project will be provided in a manner that ensures safe and adequate care to the public to be served and in accord with applicable federal and state laws, rules, and regulations. The assessment of the conformance of a project to this criterion shall include but not be limited to consideration as to whether:
- (a) The applicant has no history, in this state or elsewhere, of a criminal conviction which is reasonably related to the applicant's competency to exercise responsibility for the ownership or operation of a health care facility, a denial or revocation of a license to operate a health care facility, a revocation of a license to practice a health profession, or a decertification as a provider of services in the Medicare or Medicaid program because of failure to comply with applicable federal conditions of participation; or
- (b) If the applicant has such a history, whether the applicant has affirmatively established to the department's satisfaction by clear, cogent and convincing evidence that the applicant can and will operate the proposed project for which the certificate of need is sought in a manner that ensures safe and adequate care to the public to be served and conforms to applicable federal and state requirements.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–230, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 81–09–012 (Order 210), § 248–19–390, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), § 248–19–390, filed 11/30/79.]

- WAC 246-310-240 Determination of cost containment. A determination that a proposed project will foster cost containment shall be based on the following criteria:
- (1) Superior alternatives, in terms of cost, efficiency, or effectiveness, are not available or practicable.
 - (2) In the case of a project involving construction:
- (a) The costs, scope, and methods of construction and energy conservation are reasonable; and
- (b) The project will not have an unreasonable impact on the costs and charges to the public of providing health services by other persons.
- (3) The project will involve appropriate improvements or innovations in the financing and delivery of health services which foster cost containment and which promote quality assurance and cost effectiveness.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–240, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), § 248–19–400, filed 2/28/86; 81–09–012 (Order 210), § 248–19–400, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), § 248–19–400, filed 11/30/79.]

- WAC 246-310-250 Open heart surgery. (1) Open heart surgery means a specialized surgical procedure (excluding organ transplantation) which utilizes a heart—lung bypass machine and is intended to correct congenital and acquired cardiac and coronary artery disease.
- (2) Open heart surgery is a tertiary service as listed in WAC 248-19-231. To receive approval an open heart surgery program must meet the following standards in addition to applicable review criteria in WAC 248-19-370, 248-19-380, 248-19-390 and 248-19-400.
- (3) There shall be a minimum volume of two hundred adult open heart surgery procedures (one hundred if exclusively pediatric) performed annually in each institution performing open heart surgery within three years of initial operation.
- (4) To receive approval an application shall meet the following standards unless the department finds that the new open heart surgery operating rooms are needed to substantially improve access to care.
- (a) New open heart surgery services shall not result in a number of open heart operating rooms that exceeds the maximum number of open heart operating rooms needed in the area by 1995, as determined by multiplying the state's most recent (at the time of the application) adult or pediatric open heart surgery use rate by the area's 1995 adult or pediatric populations, and dividing the result by the minimum capacity of adult or pediatric units (two hundred or one hundred surgeries, respectively).
- (b) There shall be no new open heart surgery operating rooms approved until all facilities providing open heart surgery in the planning area are performing at least two hundred (one hundred for pediatric) open heart surgeries per year per open heart surgery operating room.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-250, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.38 RCW. 90-13-116 (Order 67), § 248-19-600, filed 6/21/90, effective 7/1/90.]

[Title 246 WAC—p 368] (1990 Ed.)

- WAC 246-310-260 Kidney transplantation. (1) Kidney transplantation is a tertiary service as listed in WAC 248-19-231.
- (2) To receive approval a kidney transplant center must meet the following standards in addition to applicable review criteria in WAC 248-19-370, 248-19-380, 248-19-390, and 248-19-400.
- (a) A center shall perform at least fifteen transplants annually by the fourth year of operation.
- (b) A center shall document that it will meet the requirements of membership to the United Network for Organ Sharing (UNOS) or its successor organization.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-260, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.919. 90-16-058 (Order 073), § 248-19-601, filed 7/27/90, effective 8/27/90.]

- WAC 246-310-270 Ambulatory surgery. (1) To receive approval, an ambulatory surgical facility must meet the following standards in addition to applicable review criteria in WAC 248-19-370, 248-19-380, 248-19-390, and 248-19-400.
- (2) The area to be used to plan for operating rooms and ambulatory surgical facilities is the secondary health services planning area.
- (3) Secondary health services planning areas are: San Juan, Whatcom, East Skagit, Whidbey-Fidalgo, Western North Olympic, East Clallam, East Jefferson, North Snohomish, Central Snohomish, East Snohomish, Southwest Snohomish, Kitsap, North King, East King, Central King, Southwest King, Southeast King, Central Pierce, West Pierce, East Pierce, Mason, West Grays Harbor, Southeast Grays Harbor, Thurston, North Pacific, South Pacific, West Lewis, East Lewis, Cowlitz-Wahkiakum-Skamania, Clark, West Klickitat, East Klickitat, Okanogan, Chelan-Douglas, Grant, Kittitas, Yakima, Benton-Franklin, Ferry, North Stevens, North Pend Oreille, South Stevens, South Pend Oreille, Southwest Lincoln, Central Lincoln, Spokane, Southwest Adams, Central Adams, Central Whitman, East Whitman, Walla Walla, Columbia, Garfield, and Asotin.
- (4) Outpatient operating rooms should ordinarily not be approved in planning areas where the total number of operating rooms available for both inpatient and outpatient surgery exceeds the area need.
- (5) When a need exists in planning areas for additional outpatient operating room capacity, preference shall be given to dedicated outpatient operating rooms.
- (6) An ambulatory surgical facility shall have a minimum of two operating rooms.
- (7) Ambulatory surgical facilities shall document and provide assurances of implementation of policies to provide access to individuals unable to pay consistent with charity care levels provided by hospitals affected by the proposed ambulatory surgical facility. The amount of an ambulatory surgical facility's annual revenue utilized to finance charity care shall be at least equal to or greater than the average percentage of total patient revenue, other than medicare or medicaid, that affected hospitals

- in the planning area utilized to provide charity care in the last available reporting year.
- (8) The need for operating rooms will be determined using the method identified in subsection (9) of this section.
- (9) Operating room need in a planning area shall be determined using the following method:
 - (a) Existing capacity.
- (i) Assume the annual capacity of one operating room located in a hospital and not dedicated to outpatient surgery is ninety-four thousand two hundred fifty minutes. This is derived from scheduling forty-four hours per week, fifty-one weeks per year (allowing for five weekday holidays), a fifteen percent loss for preparation and clean-up time, and fifteen percent time loss to allow schedule flexibility. The resulting seventy percent productive time is comparable to the previously operating hospital commission's last definition of "billing minutes" which is the time lapse from administration of anesthesia until surgery is completed.
- (ii) Assume the annual capacity of one operating room dedicated to ambulatory surgery is sixty-eight thousand eight hundred fifty minutes. The derivation is the same as (a)(i) of this subsection except for twenty-five percent loss for prep/clean-up time and scheduling is for a thirty-seven and one-half hour week. Divide the capacity minutes by the average minutes per outpatient surgery (see (a)(vii) of this subsection). Where survey data are unavailable, assume fifty minutes per outpatient surgery, resulting in a capacity for one thousand three hundred seventy-seven outpatient surgeries per room per year.
- (iii) Calculate the total annual capacity (in number of surgeries) of all dedicated outpatient operating rooms in the area.
- (iv) Calculate the total annual capacity (in number of minutes) of the remaining inpatient and outpatient operating rooms in the area, including dedicated specialized rooms except for twenty—four hour dedicated emergency rooms. When dedicated emergency operating rooms are excluded, emergency or minutes should also be excluded when calculating the need in an area. Exclude cystoscopic and other special purpose rooms (e.g., open heart surgery) and delivery rooms.
 - (b) Future need.
- (i) Project number of inpatient and outpatient surgeries performed within the hospital planning area for the third year of operation. This shall be based on the current number of surgeries adjusted for forecasted growth in the population served and may be adjusted for trends in surgeries per capita.
- (ii) Subtract the capacity of dedicated outpatient operating rooms from the forecasted number of outpatient surgeries. The difference continues into the calculation of (b)(iv) of this subsection.
- (iii) Determine the average time per inpatient and outpatient surgery in the planning area. Where data are unavailable, assume one hundred minutes per inpatient and fifty minutes per outpatient surgery. This excludes preparation and cleanup time and is comparable to "billing minutes."

- (iv) Calculate the sum of inpatient and remaining outpatient (from (b)(ii) of this subsection) operating room time needed in the third year of operation.
 - (c) Net need.
- (i) If (b)(iv) of this subsection is less than (a)(iv) of this subsection, divide their difference by ninety-four thousand two hundred fifty minutes to obtain the area's surplus of operating rooms used for both inpatient and outpatient surgery.
- (ii) If (b)(iv) of this subsection is greater than (a)(iv) of this subsection, subtract (a)(iv) of this subsection from the inpatient component of (b)(iv) of this subsection and divide by ninety-four thousand two hundred fifty minutes to obtain the area's shortage of inpatient operating rooms. Divide the outpatient component of (b)(iv) of this subsection by sixty-eight thousand eight hundred fifty to obtain the area's shortage of dedicated outpatient operating rooms.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-270, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.919. 90-16-058 (Order 073), § 248-19-700, filed 7/27/90, effective 8/27/90.]

- WAC 246-310-280 Kidney disease treatment centers. (1) To receive approval, a kidney disease treatment center must meet the following standards in addition to applicable review criteria in WAC 248-19-370, 248-19-380, 248-19-390, and 248-19-400.
- (2) End stage renal disease planning areas shall be health service areas. The health service areas are as follows:
- (a) Health service Area I includes Clallam, Jefferson, San Juan Island, Kitsap, Pierce, King, Snohomish, Skagit, and Whatcom counties.
- (b) Health service Area II includes Thurston, Mason, Grays Harbor, Pacific, Wahkiakum, Lewis, Cowlitz, Clark, Skamania, and Klickitat counties.
- (c) Health service Area III includes Okanogan, Chelan, Douglas, Grant, Kittitas, Yakima, Benton, and Franklin counties.
- (d) Health service Area IV includes Ferry, Stevens, Pend Oreille, Lincoln, Spokane, Adams, Whitman, Walla Walla, Columbia, Garfield, and Asotin counties.
- (3) The maximum number of dialysis stations needed in an end stage renal disease planning area shall be determined using the following data:
 - (a) Utilization of a dialysis station or a center.
- (i) One hundred percent utilization equals twelve dialyses per week.
- (ii) Eighty percent utilization equals 9.6 dialyses per week.
- (iii) When determining the utilization of an existing center each station on which at least six patients have been self/home trained annually shall be deducted from the approved stations.
- (iv) When determining the utilization of an existing center, the utilization rate may be reduced to seventy—five percent and seventy percent in facilities with ten percent and twenty percent peritoneal dialysis patients respectively.

- (b) At the time of the application, the most recent Washington state office of financial management population data.
 - (c) Historical data of the Northwest renal network.
- (d) The health service area's most recent three-year average shall be used for incidence, death, transplant, and home training rates.
- (4) The maximum number of dialysis stations projected as needed in an ESRD planning area shall be determined using the following methodology:
- (a) Identify the number of incenter patients expected in the planning area in the year in which the application is submitted.
- (i) Add expected new ESRD and re-entry cases per year.
 - (ii) Subtract expected ESRD patient deaths per year.
- (iii) Subtract expected ESRD home training patients per year.
- (iv) Subtract the number of expected functional transplants per year.
- (b) Calculate the number of expected dialyses by multiplying the number of incenter patients by three treatments per week.
- (c) Calculate the number of dialysis stations needed in the applicant's projected third full year of operation using eighty percent utilization.
- (5) All kidney disease treatment centers within a reasonable driving time must be operating at an eighty percent utilization rate before additional stations are approved.
- (6) New kidney disease treatment centers must reasonably project an eighty percent utilization rate by the third year of operation.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–280, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.919. 90–16–058 (Order 073), § 248–19–701, filed 7/27/90, effective 8/27/90.]

- WAC 246-310-350 Nursing home and continuing care retirement community definitions. The department shall use the definitions in this section in sections WAC 248-19-805 Nursing home bed need projection method through WAC 248-19-886 Continuing care retirement community (CCRC) structure and process of care review standards.
- (1) "Baseline bed need" means the number of additional nursing home beds needed in the state or a planning area by the resident population by the projection year.
- (2) "Baseline projection" means the number of nursing home beds calculated by the department as necessary state—wide or within a planning area, by the end of the projection period, for reasonable and appropriate use by the resident population.
- (3) "Bedded" is a term which describes the adequacy of the bed supply within a planning area relative to the baseline projection.
- (a) A planning area is "under-bedded" if the area's bed-to-population ratio is less than the target ratio.

- (b) A planning area is "adequately bedded" if the area's bed-to-population ratio is between the target ratio and the state-wide current ratio.
- (c) A planning area is "over-bedded" if its bed-to-population ratio is greater than the state-wide current ratio.
- (4) "Bed supply" means within a geographic area the total number of:
- (a) Nursing home beds which are licensed or certificate of need approved but not yet licensed, excluding:
- (i) Those nursing home beds certified as intermediate care facility for the mentally retarded (ICF-MR) the operators of which have not signed an agreement on or before July 1, 1990, with the department of social and health services to give appropriate notice prior to termination of the ICF-MR service;
- (ii) New or existing nursing home beds within a Type A CCRC which are approved under the provisions of WAC 248-19-810(5); or
- (iii) Nursing home beds within a CCRC which is excluded from the definition of a health care facility per RCW 70.38.025(6); and
- (iv) In computing the bed supply of a planning area, but not in computing state—wide bed supply, new nursing home beds within a Type B CCRC as defined in subsection (8)(b) of this section.
- (b) Licensed hospital beds used for long-term care or certificate of need approved hospital beds to be used for long-term care not yet in use, excluding swing-beds.
- (5) "Bed-to-population ratio" means the bed supply per one thousand persons of the estimated or forecast resident population age sixty-five and older, and includes the following:
- (a) "State-wide current ratio" means a bed-to-population ratio computed from the most recent state-wide bed supply and the most recent estimate of the state-wide resident population.
- (b) "Target ratio" means a bed-to-population ratio of forty-five established for planning and policy-making purposes.
- (6) "Concurrent reviews" have been scheduled in WAC 248-19-327 for competing projects proposing nursing home beds. The redistribution of nursing home beds certified as intermediate care for the mentally retarded (ICF-MR) to skilled nursing facility beds will not be subject to concurrent review when the ICF-MR beds have been counted in the "bed supply" as referenced in subsection (4)(a)(i) of this section.
- (7) "Continuing care contract" means a contract providing a person, for the duration of that person's life or for a term in excess of one year, shelter along with nursing, medical, health—related, or personal care services. The contract is conditioned on the transfer of property, the payment of an entrance fee to the provider of such services, or the payment of periodic charges for the care and services involved. A continuing care contract is not excluded from this definition because the contract is mutually terminable or because shelter and services are not provided at the same location.

- (8) A "continuing care retirement community (CCRC)" means any of a variety of entities, unless excluded from the definition of health care facility under RCW 70.38.025(6), which provides shelter and services based on continuing care contracts with its members. CCRCs are categorized as follows:
 - (a) "Type A CCRC" means a CCRC which:
- (i) Maintains for a period in excess of one year a CCRC contract with a member which provides or arranges for at least the following specific services:
 - (A) Independent living units;
- (B) Nursing home care with no limit on the number of medically needed days;
 - (C) Assistance with activities of daily living; and
- (D) Services equivalent in scope to either state chore services or Medicaid home health services;
- (ii) Continues a contract, if a member is no longer able to pay for services;
- (iii) Offers services only to contractual members with limited exception during a transition period; and
- (iv) Holds the Medicaid program harmless from liability for costs of care, even if the member depletes his or her personal resources.
 - (b) "Type B CCRC" means a CCRC which:
- (i) Maintains for a period in excess of one year a CCRC contract with its members;
- (ii) Provides shelter along with nursing, medical, health-related, or personal care services;
- (iii) May terminate a contract, if a member is unable to pay for services;
- (iv) May admit patients to the nursing home who are not CCRC members; and
- (v) May maintain Medicaid contracts and/or other requirements for third party payment.
- (9) A "member" of a CCRC means an individual who has signed a continuing care contract with a CCRC.
- (10) "Net bed need" means baseline bed need of a planning area changed by any redistributions as follows:
- (a) Adding nursing home beds being redistributed from another nursing home planning area or areas; or
- (b) Subtracting nursing home beds being redistributed to another nursing home planning area or areas.
- (11) "Planning and service area" (PSA) means the geographic area of one or more counties designated by the department of social and health services' aging and adult services administration to be represented by a single area agency on aging.
- (12) "Planning area" means each individual county designated by the department as the smallest geographic area for which nursing home bed need projections are developed, except as follows:
- (a) Clark and Skamania counties shall be one planning area.
- (b) Chelan and Douglas counties shall be one planning area.
- (c) Camano Island shall be included in Snohomish County and excluded from Island County.
- (13) "Projection period" means the interval of time between July 1, 1990, and June 30, 1993.
- (14) "Projection year" means the time interval between July 1, 1992, and June 30, 1993.

- (15) "Redistribution" means a shift of net bed need among planning areas in accordance with a redistribution plan as described in WAC 248-19-810(4).
- (16) "Resident population" means the number of residents sixty—five years of age and older living within the same geographic area which:
- (a) Excludes contract holders living within a Type A CCRC:
- (i) With approval for new nursing home beds under the provisions of WAC 248-19-810(5); or
- (ii) Excluded from the definition of a health care facility per RCW 70.38.025(6);
- (b) Is calculated using demographic data obtained from:
 - (i) The office of financial management; and
- (ii) Certificate of need applications and exemption requests previously submitted by Type A CCRC.
- (17) "Swing beds" means up to the first five hospital beds designated by an eligible rural hospital which are available to provide either acute care or long—term nursing services as required.
- (18) "Transition period" means the period of time, not exceeding five years, between the date the facility is inhabited by a member and the date it fully meets the requirements of a Type A CCRC as contained in subsection (8)(a) of this section.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–350, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.919. 90–12–071 (Order 062), § 248–19–800, filed 6/1/90, effective 7/1/90.]

WAC 246-310-360 Nursing home bed need method.

- (1) The department has developed the following projection method for determining the number of new nursing home beds necessary for reasonable and appropriate use.
- (2) The department shall use the following projection method during the projection period.
- (a) The department shall calculate the state-wide baseline bed need for the projection year which is:
 - (i) The greater of:
- (A) The product of the estimated state—wide resident population for the projection year multiplied by the target ratio; or
 - (B) Thirty thousand two hundred;
- (ii) Minus thirty-five nursing home beds for a state-wide AIDS nursing home demonstration project to be located in PSA # 4.
- (b) The department shall calculate the baseline projection for each planning area by multiplying the projection year estimated resident population for each planning area by either:
 - (i) The target ratio; or
- (ii) If thirty thousand two hundred minus thirty-five is used as the state-wide baseline bed need, the bed-to-population ratio computed using a state-wide bed supply of thirty thousand one hundred sixty-five and state-wide projection year resident population.
- (c) The department shall calculate the projected current supply ratio for each planning area, which is a bed-to-population ratio computed from the most recent bed

- supply and the projection year estimate of resident population.
- (d) The department shall rank order each planning area from lowest to highest according to the planning area's projected current supply ratio.
- (e) The department shall determine the areas of the state that will be under-bedded, adequately-bedded, and over-bedded in the projection year by comparing each planning area's projected current supply ratio to the target ratio and state-wide current ratio.
- (f) The department shall compare the most recent state-wide bed supply with the state-wide baseline bed need.
- (i) If the current state—wide bed supply is greater than or equal to the state—wide baseline bed need, then:
- (A) Calculation of planning area need for new beds ends; and
- (B) Need for new beds in every planning area is determined to be zero.
- (ii) If the current state—wide bed supply is less than the state—wide baseline bed need, the department shall determine the difference between the state—wide baseline bed need and the state—wide current bed supply, which shall be called state—wide available beds.
- (A) If the number of state—wide available beds is large enough, the department shall assign to each under—bedded planning area the number of beds necessary to bring it up to the target ratio in the projection year.
- (B) If the number of state—wide available beds is insufficient to assign each under—bedded planning area the number of new beds necessary to bring it up to the target ratio, the department shall assign to each under—bedded planning area a proportion of state—wide available beds equal to the ratio of that planning area's bed need to reach the target ratio to the total beds required for all under—bedded planning areas to reach the target ratio in the projection year.
- (C) If after assigning new beds to under-bedded planning areas per (f)(ii)(A) of this subsection state—wide available beds remain, the department shall assign this remainder to under-bedded or adequately-bedded planning areas as follows:
- (I) Since currently under-bedded planning areas have been assigned sufficient beds to reach the target ratio under provisions of (f)(ii)(A) of this subsection, for purposes of this step of the calculation the department shall consider each currently under-bedded planning area to be adequately-bedded and to have a bed supply exactly sufficient to achieve the target ratio in the projection year.
- (II) The department shall determine the number of beds needed to bring all adequately-bedded planning areas up to the state-wide current ratio.
- (III) If the remainder of state—wide available beds is large enough, the departments shall assign adequately—bedded planning areas the number of beds each needs to reach the state—wide current ratio in the projection year.
- (IV) If the remainder of state-wide available beds is insufficient to bring adequately-bedded planning areas up to the state-wide current ratio, the department shall

assign to each adequately-bedded planning area a proportion of state-wide available beds equal to the ratio of that planning area's bed need to reach the target ratio to the total beds required for all adequately-bedded planning areas to reach the target ratio in the projection year.

(D) The department shall not assign more new beds to a planning area than the number which, when added to the planning area's bed supply, will raise the planning area's bed-to-population ratio to the greater of the target ratio and the state-wide current ratio.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–360, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.919. 90–12–071 (Order 062), § 248–19–805, filed 6/1/90, effective 7/1/90.]

WAC 246-310-370 Nursing home bed need method revision. (1) The department shall review the projection method and may make changes in accordance to the following schedule:

(a) By June 30, 1992, the department, in consultation with the department of social and health services and appropriate advisory bodies representing both consumers and providers, shall review the projection method.

(b) During the first half of the projection year, the department shall amend these rules to change the projection method as necessary.

(c) During January 1993 the department shall calculate the baseline projections for the projection period beginning July 1, 1993.

(2) When reviewing the projection method the department shall consider the following:

(a) The national bed-to-population ratio and the bed-to-population ratios of other states judged by the aging and adult services administration of the department of social and health services to have reasonable and progressive long-term care policies;

(b) State governmental policy goals for distributing scarce resources between nursing homes and other institutional or community based services;

- (c) The effects of developments in the delivery or financing of long-term care services on nursing home bed need: and
- (d) Progress in developing other long-term care services for the state-wide resident population.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-370, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.919. 90-12-071 (Order 062), § 248-19-806, filed 6/1/90, effective 7/1/90.]

WAC 246-310-380 Nursing home bed need standards. (1) The department shall use the following rules to interpret the certificate of need review criteria contained in WAC 248-19-370(1) for applications proposing the following:

(a) Construction, development, or other establishment of a new nursing home;

(b) Increase in the licensed bed capacity of a nursing home or a hospital long-term care unit; or

(c) Change in license category of beds from the following to nursing home or hospital long-term care unit beds: (i) Acute care; or

(ii) Boarding home care.

(2) The department shall comply with the following time schedule for developing bed need projections:

(a) By the last working day in January of each year, the department shall recalculate the baseline projection for each planning area.

(b) By the last working day in January of each year, the department shall provide the aging and adult services administration of the department of social and health services with the baseline bed need for each planning area, pending the department's decisions on applications submitted during the previous year's nursing home concurrent review cycles.

(c) By the last working day in January of each year, the department shall rank order planning areas from lowest to highest by the projected current supply ratio.

(d) By the first working day of June of each year, the department shall calculate the net bed need for each planning area.

(3) The following are the baseline projections for the projection period, listed by planning and service area and planning area. When a planning area baseline projection is greater than the "bed supply" no beds can be added until the state—wide target ratio is reached, except as allowed in subsection (6) of this section.

	Planning area	Baseline	projection
(a) PSA	# 1		
	Clallam Grays Harbor Jefferson Pacific		480 488 175 172
(b) PSA	# 2		
	Island excluding Camand San Juan Skagit Whatcom	o	397 92 605 887
(c) PSA	# 3		
	Snohomish including Camano		2,342
(d) PSA	# 4		
	King AIDS project		9,030 35
(e) PSA	# 5		
	Pierce		3,253
(f) PSA	# 6		
	Lewis Mason Thurston		467 302 972
(g) PSA	# 7		
	Clark/Skamania Cowlitz Klickitat Wahkiakum		1,290 521 176 28

Planning area	Baseline projection
(h) PSA # 8	
Adams Chelan/Douglas Grant Lincoln Okanogan	80 623 320 95 249
(i) PSA # 9	
Asotin Benton Columbia Franklin Garfield Kittitas Walla Walla Yakima	151 423 41 181 23 182 412 1,459
(j) PSA # 11	
Ferry Pend Oreille Spokane Stevens Whitman	32 66 2,632 193 219
(k) PSA # 13	
Kitsap	1,108

- (4) The aging and adult services administration of the department of social and health services may submit any redistribution plans to the department which:
- (a) Redistribute baseline bed need among planning areas;
 - (b) Document the following:
- (i) That all involved area agencies on aging support each proposed redistribution; and
- (ii) That the redistribution plan was approved by the assistant secretary for aging and adult services of the department of social and health services.
- (c) Are received by the department no later than April tenth or the first working day thereafter.
- (5) The department shall limit to three hundred the total number of nursing home beds approved for all Type A CCRC which propose or are operating within a transition period.
- (a) These three hundred beds available for Type A CCRC during transition periods shall be in addition to the net nursing home beds needed in all of the planning areas.
- (b) All nursing home beds approved for Type A CCRC which propose or are operating within a transition period shall be counted as beds within this three hundred bed limitation unless and until the CCRC fully complies with all provisions of the Type A CCRC performance standards.
- (6) The department shall not issue certificates of need approving more than the net bed need indicated for a given planning area, unless:
- (a) The department finds such additional beds are needed to be located reasonably close to the people they serve; and

(b) The department explains such approval in writing.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–380, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.919. 90–12–072 (Order 063), § 248–19–810, filed 6/1/90, effective 7/1/90.]

- WAC 246-310-390 Nursing home bed need adjustments. (1) The department shall use the procedures described in this section to make adjustments to planning area net bed need.
- (2) For planning areas for which a nursing home review is scheduled or is ongoing, the department shall use the following procedures to adjust a planning area's net bed need between April tenth or the first working day thereafter and the last working day in January of the following year.
- (a) Where an increase in the bed supply of a planning area results in a reduction in net bed need, the department shall use the following procedures:
- (i) When a reduction in net bed need occurs prior to the date of beginning of review for the applicable concurrent review cycle, the department shall:
- (A) Inform, in writing, all persons from whom the department has received an application and/or a valid letter of intent of the reduction; and
- (B) Explain the procedures for withdrawing or amending a certificate of need application.
- (ii) When a reduction in net bed need occurs after the date of beginning of review for the applicable concurrent review cycle, the department shall use the need projected at the time the review began in reaching a decision on each affected application.
- (b) Where a decrease in the bed supply of a planning area results in the increase in net bed need, the department shall:
 - (i) Use the following policies:
- (A) If such a decrease in the bed supply would make a planning area under-bedded, the department shall:
- (I) Assign to the planning area only enough beds for the planning area to reach the target ratio in the projection year, but not to exceed the number of beds which closed; and
- (II) Redistribute any remaining beds to planning areas state—wide through the next scheduled recalculation of baseline projections for all planning areas.
- (B) If such decrease in the bed supply would not make a planning area under-bedded, the department shall redistribute any remaining beds to planning areas state-wide through the next scheduled recalculation of baseline projections for all planning areas.
- (ii) Subject to the provisions of (b)(i) of this subsection, use the following procedures:
- (A) When an increase in net bed need can be made prior to the last day on which the department can accept amendments to applications under review, the department shall:
 - (I) Notify all affected applicants in writing; and
- (II) Explain to each affected applicant the procedures for amending a certificate of need application.

- (B) When an increase cannot be made prior to the last day on which the department can accept amendments to applications under review, the department shall include the increased net bed need in any subsequent decisions on each affected application or the next applicable concurrent review cycle, whichever occurs first.
- (3) For planning areas for which a nursing home review is not scheduled or ongoing, the department shall use the following procedures to adjust a planning area's net bed need between April tenth or the first working day thereafter and the last working day in January of the following year:
- (a) If a decrease in the bed supply would make a planning area under-bedded, the department shall:
- (i) Assign to the planning area only enough beds for the planning area to reach the target ratio in the projection year; and
- (ii) Redistribute any remaining beds to planning areas state—wide through the next scheduled recalculation of baseline projections for all planning areas.
- (b) If such decrease in the bed supply would not make a planning area under-bedded, the department shall redistribute any remaining beds to planning areas state-wide through the next scheduled recalculation of baseline projections for all planning areas.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-390, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.919. 90-12-072 (Order 063), § 248-19-811, filed 6/1/90, effective 7/1/90.]

- WAC 246-310-400 AIDS long-term care pilot facility review standards. (1) Until an AIDS long-term care pilot facility has received a license to operate as a nursing home in this state, the department shall apply the standards in this section and those in WAC 248-19-810 and 248-19-820 in the review of applications for an AIDS long-term care pilot facility.
- (2) The department shall use the standards in this subsection to interpret the certificate of need review criteria contained in WAC 248-19-370.
- (a) Applicants for a certificate of need shall propose a facility to be:
- (i) Licensed for not more than thirty-five nursing home beds;
- (ii) Located in the King County nursing home planning area;
 - (iii) Located in reasonable proximity to:
 - (A) A hospital;
 - (B) An outpatient radiology service; and
 - (C) An outpatient laboratory service; and
- (iv) Operated with admissions policies which select patients with the following characteristics:
- (A) Rapidly fluctuating care needs including at least some period of needing skilled nursing care;
 - (B) Do not need acute hospitalization; and
- (C) Need some level of twenty-four hour care, but cannot live at home.
- (v) Designated to provide a residential environment supporting people in living at the maximum level of independence possible.
 - (b) Applicants for a certificate of need shall:

- (i) Make a commitment of at least five years to maintaining the facility as described in the application; and
- (ii) Admit patients with fluctuating care needs similar to those with AIDS.
- (3) The department, in interpreting the certificate of need review criteria contained in WAC 248-19-380, shall give preference to those applicants that demonstrate substantial financial support from a combination of community, federal, and/or private foundation sources.
- (4) The department shall use the standards in this subsection to interpret the certificate of need review criteria contained in WAC 248-19-390.
 - (a) Applicants for a certificate of need shall:
- (i) Show how planning the facility includes input from community AIDS service organizations;
- (ii) Show how they will integrate the facility's services with the services provided by other public and private AIDS services organizations; and
- (iii) Document their experience in health care services delivery to patients with AIDS.
- (b) Applicants for a certificate of need shall express their intent to develop a policy advisory board after the facility is in operation, to include representatives from the groups served by the facility.
- (5) The department, in interpreting the certificate of need review criteria contained in WAC 248-19-400, shall require that applicants demonstrate their capability to evaluate the project and state their willingness to share the information with the assistant secretary for HIV/AIDS infectious diseases.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as \$ 246-310-400, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.919. 90-12-072 (Order 063), \$ 248-19-840, filed 6/1/90, effective 7/1/90.]

- WAC 246-310-410 Swing bed review standards. (1) The department shall use the following rules, in addition to those under WAC 248-19-810 and 248-19-820 to interpret the certificate of need review criteria contained in WAC 248-19-370, 248-19-380, 248-19-390, and 248-19-400 for applications by hospitals proposing an increase in the number of designated swing beds.
- (2) Swing beds are defined as up to the first five hospital beds, so designated by an eligible rural hospital, which are available to provide either acute care or longterm care nursing services as required.
 - (3) Hospitals proposing swing bed projects shall:
- (a) Be located in geographic areas of the state defined by the United States Bureau of the Census as a nonstandardized metropolitan statistical area; and
- (b) Have total licensed bed capacity not exceeding fifty.
- (4) Hospitals shall demonstrate ability to meet minimum Medicare standards of care for rural hospital swing beds.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–410, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.919. 90–12–072 (Order 063), § 248–19–860, filed 6/1/90, effective 7/1/90.]

WAC 246-310-470 Review and action on health maintenance organization projects. (1) Undertakings requiring a certificate of need.

A certificate of need shall be required for any undertaking which, in accordance with WAC 248-19-230, is subject to the provisions of chapter 248-19 WAC, unless an exemption has been granted for such undertaking under the provisions of WAC 248-19-405.

(2) Required approval.

The secretary's designee shall issue a certificate of need for a proposed project if the certificate of need applicant for the proposed project is a health maintenance organization or a health care facility controlled (directly or indirectly) by a health maintenance organization and the department finds the proposed project meets the criteria set forth in WAC 248-19-370(6).

(3) Limitation on denials.

The secretary's designee shall not deny a certificate of need to a health maintenance organization or a health care facility controlled (directly or indirectly) by a health maintenance organization solely because a proposed project is not discussed in the applicable regional health plan, annual implementation plan, or state health plan.

(4) Sale, acquisition, or lease of facilities or equipment for which a certificate of need has been issued.

A health care facility (or portion thereof) or medical equipment for which a certificate of need has been issued under the provisions of this section shall not be sold or leased and a controlling interest in such facility or equipment or in a lease of the facility or equipment shall not be acquired unless an exemption or a certificate of need for such sale, lease, or acquisition has been granted by the secretary's designee.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–470, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), § 248–19–410, filed 2/28/86; 81–09–012 (Order 210), § 248–19–410, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), § 248–19–410, filed 11/30/79.]

WAC 246-310-480 Projects proposed for the correction of deficiencies. (1) For the purposes of this section, "correction of deficiencies" shall mean one or more of the following:

- (a) Eliminating or preventing imminent safety hazards as defined by federal, state, or local fire, building, or life safety codes or regulations; or
 - (b) Complying with state licensing standards; or
- (c) Complying with accreditation or certification standards which must be met to receive reimbursement under Titles XVIII or XIX of the Social Security Act.
- (2) An application submitted for a project limited to the correction of deficiencies, as defined in subsection (1) of this section, shall be approved unless the department finds, after consultation with the appropriate regional health council, that:
- (a) The facility or service with respect to which such capital expenditure is proposed is not needed; or
- (b) The obligation of such capital expenditure is not consistent with the state health plan in effect.

- (3) A determination a facility or service is not needed shall be made only if the department finds the facility or service has been identified in the state health plan as not being needed.
- (4) An application submitted for the correction of deficiencies shall be reviewed under the expedited review process, in accordance with WAC 248–19–340, unless it qualifies for emergency review in accordance with WAC 248–19–350.
- (5) An application reviewed under the provisions of this section shall be approved only to the extent the capital expenditure is needed for the correction of the deficiency.
- (6) If the department finds any portion of the project or the project as a whole is not needed for the correction of deficiencies, such portion or entire project shall be reviewed in accordance with WAC 248-19-360, 248-19-370, 248-19-380, 248-19-390, and 248-19-400.
- (7) If the department finds a proposed capital expenditure is needed to correct deficiencies, as defined in subsection (1) of this section, the criteria in WAC 248–19–370 shall not be applied to the consideration of the project.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-480, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86-06-030 (Order 2344), § 248-19-415, filed 2/28/86; 81-09-012 (Order 210), § 248-19-415, filed 4/9/81, effective 5/20/81.]

WAC 246-310-490 Written findings and actions on certificate of need applications. (1) Written findings.

- (a) The findings of the department's review of a certificate of need application shall be stated in writing and include the basis for the decision of the secretary's designee as to whether a certificate of need is to be issued or denied for the proposed project.
- (b) In making its findings and taking action on a certificate of need application, the department shall use all criteria contained in chapter 248–19 WAC applicable to the proposed project.
- (i) The written findings shall identify any criterion the department has decided is not applicable to the particular project and give the reason for such decision.
- (ii) The secretary's designee may deny a certificate of need if the applicant has not provided the information which is necessary to a determination that the project meets all applicable criteria and which the department has prescribed and published as necessary to a certificate of need review of the type proposed: *Provided however*, That the department has requested such information in a screening letter sent in accordance with WAC 248–19–280 (1)(c).
- (c) The department shall make written findings on the extent to which the project meets the criteria set forth in WAC 248-19-370(1) and (2) when the secretary's designee issues a certificate of need directly related to the provision of health services, beds, or major medical equipment: *Provided however*, That no such written finding shall be necessary for projects for the correction of deficiencies of the types described in WAC 248-19-415 and for projects proposed by or on behalf of a health

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maintenance organization or a health care facility controlled, directly or indirectly, by a health maintenance organization.

- (d) When, as a part of concurrent review proceedings, the secretary's designee makes a decision to approve an application or applications and to disapprove other competing applications, he or she shall provide a specific written statement of reasons for determining the approved application or applications to be superior.
 - (2) Separability of application and action.

When a certificate of need application is for multiple services or multiple components or the proposed project is to be multiphased, the secretary's designee may take individual and different action on separable portions of the proposed project.

- (3) Conditional certificate of need.
- (a) The secretary's designee in making his or her decision on a certificate of need application may decide to issue a conditional certificate of need if the department finds the project is justified only under specific circumstances: *Provided however*, That conditions shall relate directly to the project being reviewed and to review criteria.
- (b) When the department finds a project for which a certificate of need is to be issued does not satisfy the review criteria set forth in WAC 248-19-370 (1) and (2), the secretary's designee may impose a condition or conditions that the applicant take affirmative steps so as to satisfy those review criteria. In evaluating the accessibility of the project, the current accessibility of the facility as a whole shall be taken into consideration.
- (c) The conditions attached to a certificate of need may be released by the secretary's designee upon the request of the health care facility or health maintenance organization for which the certificate of need was issued.
- (i) The request must include information needed by the department demonstrating the conditions are no longer valid and the release of such conditions would be consistent with the purpose of chapter 70.38 RCW.
- (ii) A request for the removal of a condition must be submitted in accordance with WAC 248-19-280 and will be reviewed in accordance with the regular or expedited review procedures described in WAC 248-19-330 or 248-19-340.
- (4) Distribution of written findings and statement of decision.
- (a) A copy of the department's written findings and statement of the decision of the secretary's designee on a certificate of need application shall be sent to:
- (i) The person submitting the certificate of need application;
- (ii) The regional health council for the health service area in which the proposed project is to be located;
- (iii) The hospital commission, if the proposed project is for a hospital;
- (iv) In the case of a project proposed by a health maintenance organization, the appropriate regional office of the United States Department of Health and Human Services; and
- (v) When the secretary's designee issues a certificate of need for a project which does not satisfy the review

- criteria set forth in WAC 248-19-370 (1) and (2), the appropriate regional office of the Department of Health and Human Services.
- (b) The written findings and statement of the decision of the secretary's designee on a certificate of need application shall be available to others requesting the certificate of need unit to provide access to a copy of such findings and statement.
- (5) Explanation of inconsistency with the regional health council recommendation or plan.

The department shall send to the applicant and to the appropriate regional health council a detailed, written statement as to the reasons why a decision the secretary has made on a certificate of need application is inconsistent with any of the following:

- (a) The regional health council's recommendation as to the action to be taken on the certificate of need application;
- (b) The goals and policies of the applicable regional health plan; or
- (c) The priorities of the applicable annual implementation plan.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–490, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), § 248–19–420, filed 2/28/86; 81–09–012 (Order 210), § 248–19–420, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), § 248–19–420, filed 11/30/79.]

WAC 246-310-500 Issuance, suspension, denial, revocation, and transfer of a certificate of need. (1) The secretary's designee shall issue a certificate of need to the applicant.

- (a) The secretary's designee shall issue a certificate of need for:
 - (i) The proposed project, or
 - (ii) A separable portion of the proposed project.
- (b) When the certificate of need is issued for a separable portion of the proposed project, the secretary's designee shall provide written notice to the applicant stating the reasons for the department's action.
- (c) The secretary's designee shall issue a certificate of need only when the department finds that the project or the separable portion of the proposed project is consistent with the applicable criteria contained in chapter 248–19 WAC.
- (d) In issuing a certificate of need, the secretary's designee shall:
- (i) Specify the maximum capital expenditure which may be obligated under the certificate, and
- (ii) Prescribe the cost components to be included in determining the capital expenditure which may be obligated under such certificate.
- (2) The secretary's designee may issue a conditional certificate of need for a proposed project or a separable portion of the proposed project.
- (a) The conditions attached to a certificate of need must directly relate to the project being reviewed.
- (b) The conditions must directly relate to criteria contained in chapter 248-19 WAC.
- (3) The department shall apply the following provisions when suspending a certificate of need.

- (a) The secretary's designee may suspend a certificate of need for cause which shall include, but not be limited to:
 - (i) Suspicion of fraud,
 - (ii) Misrepresentation,
 - (iii) False statements,
 - (iv) Misleading statements,
- (v) Evasion or suppression of material fact in the application for a certificate of need or any of its supporting materials.
- (b) The secretary's designee shall issue an order for any suspension of a certificate of need to the person to whom the certificate of need had been issued.
- (i) Such order shall state the reason for the suspension.
- (ii) A copy of such order of suspension shall be sent to the appropriate advisory review agencies.
- (c) A suspension of a certificate of need shall not exceed one hundred twenty calendar days.
- (i) Prior to the expiration of the suspension the department shall:
- (A) Review the facts and circumstances relevant to the suspension;
- (B) Reinstate, amend, or revoke the certificate of need; and,
- (ii) Send written notice of its decision on a suspended certificate of need to:
- (A) The person to whom the certificate of need had been issued, and
 - (B) The appropriate advisory review agencies.
- (4) The secretary's designee shall send written notification of denial of a certificate of need to the applicant submitting the certificate of need application.
- (a) Such notification shall state the reasons for the denial.
- (b) Copies of such notification shall be sent to the appropriate advisory review agencies.
- (5) When a proposed project or separable portion of the proposed project is denied a certificate of need, the department shall not accept another certificate of need application for the same project or separable portion unless the department determines:
- (a) There is a substantial change in existing or proposed health facilities or services in the area to be served by the project; or
- (b) There is a substantial change in the need for the facilities or services of the type proposed in the area to be served by the project; or
- (c) One year has lapsed since the submission of the application for the certificate of need subject to regular review which was denied or the next scheduled concurrent review cycle permits the submission of applications.
- (6) The department shall apply the following provisions in the revocation of a certificate of need.
- (a) The secretary's designee may revoke a certificate of need for cause which shall include the following:
 - (i) Fraud,
 - (ii) Misrepresentation,
 - (iii) False statements,
 - (iv) Misleading statements, and

- (v) Evasion or suppression of material facts in the application of a certificate of need, or in any of its supporting materials.
- (b) When the secretary's designee revokes a certificate of need, the secretary's designee shall:
- (i) Provide written notice of revocation to the person to whom the certificate of need was issued, including a statement of the reasons for such revocation, and
- (ii) Send a copy of the notice of revocation to the appropriate advisory review agencies.
- (7) The department shall apply the following procedures in transferring or assigning a certificate of need.
- (a) The department shall consider a request to transfer or assign a certificate of need valid only when:
- (i) The person to whom the certificate of need was originally issued submits to the department a written request that the certificate of need be transferred to another person and gives the full name and complete address of the other person; and
- (ii) The person to whom the current holder of the certificate of need wishes to transfer the certificate sends an application for such transfer on a form and in such a manner as prescribed and published by the department.
- (b) The department shall review applications for transfer or assignment of a certificate of need according to the:
- (i) Expedited review procedures in WAC 248-19-340; or
 - (ii) Regular review procedures in WAC 248-19-330.
- (c) The secretary's designee shall base his or her decision to approve or deny an application to transfer or assign a certificate of need on:
- (i) The demonstrated ability of the person wishing to acquire the certificate of need to undertake, complete, and operate the project in accordance with the following review criteria:
 - (A) WAC 248-19-380 (1) and (3), and
 - (B) WAC 248-19-390 (1), (3), and (5).
- (ii) The continuing conformance of the project with all other applicable review criteria; and
- (iii) The comments and recommendations of the appropriate advisory review agency.
- (d) When the person submitting an application to transfer or assign a certificate of need proposes to modify the project description or the maximum capital expenditure, the department shall inform in writing such person that a new or amended certificate of need is required.
- (e) When the department denies an application for transfer or assignment of a certificate of need, the department shall inform in writing the person who submitted the application of the reasons for such denial.
- (f) The department shall not transfer or assign any certificate of need issued after February 1, 1988, except when:
- (i) Prior to completion of the project, death or divorce of a jointly held certificate renders it impossible for the remaining holder of the certificate to complete the project in the absence of a transfer or assignment; or

- (ii) After commencement, a substantial portion of the project has been completed by the original holder of the certificate.
- (g) The department shall not transfer or assign a certificate of need under subsections (7)(f)(i) and (ii) of this section when the authorized project is to be relocated.
- (8) When the secretary's designee fails to issue or deny a certificate of need, the applicant may seek a writ of mandamus from superior court pursuant to chapter 7.16 RCW.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–500, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.115. 89–02–040 (Order 2745), § 248–19–440, filed 12/30/88. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), § 248–19–440, filed 2/28/86; 81–09–012 (Order 210), § 248–19–440, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), § 248–19–440, filed 11/30/79.]

- WAC 246-310-560 Provision for reconsideration decision. (1) Any person or affected person may, for good cause shown, request a public hearing for the purpose of reconsideration of the decision of the secretary's designee on a certificate of need application or withdrawal of a certificate of need.
- (2) The department shall conduct a reconsideration hearing if it finds the request is in accord with the following requirements:
- (a) The request for a reconsideration hearing shall be written, be received by the department within thirty days of the department's decision on the certificate of need application or withdrawal of the certificate of need, state in detail the grounds which the person requesting the hearing believes to show good cause, and be signed by the person making the request.
- (b) Grounds which the department may deem to show good cause for a reconsideration hearing shall include but not be limited to the following:
- (i) Significant relevant information not previously considered by the department which, with reasonable diligence, could not have been presented before the department made its decision;
- (ii) Information on significant changes in factors or circumstances relied upon by the department in making its findings and decision; or
- (iii) Evidence the department materially failed to follow adopted procedures in reaching a decision.
- (3) A reconsideration hearing shall commence within thirty days after receipt of the request for the hearing.
- (4) Notification of a public reconsideration hearing on a certificate of need application or withdrawal of a certificate of need shall be sent prior to the date of such hearing by the department to the following:
 - (a) The person requesting the reconsideration hearing;
- (b) The person submitting the certificate of need application which is under reconsideration or the holder of the certificate of need;
- (c) The regional health council for the health service area in which the proposed project is to be offered or developed;

- (d) The hospital commission, if the proposed project is a hospital project;
- (e) Health care facilities and health maintenance organizations located in the health service area where the project is proposed to be located providing services similar to the services under review;
- (f) In the case of a concurrent review, other applicants competing as described in WAC 248-19-270; and to
- (g) Other persons requesting the department to send them such notification.
- (5) The department shall, within forty-five days after the conclusion of a reconsideration hearing, make written findings stating the basis of the decision made after such hearing.
- (6) The secretary's designee may, upon the basis of the department's findings on a reconsideration hearing, issue or reissue, amend, revoke, or withdraw a certificate of need or impose or modify conditions on a certificate of need for the project about which the reconsideration hearing was conducted.

Note:

No fee will be charged for a reconsideration hearing.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-560, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86-06-030 (Order 2344), § 248-19-430, filed 2/28/86; 81-09-012 (Order 210), § 248-19-430, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79-12-079 (Order 188), § 248-19-430, filed 11/30/79.]

- WAC 246-310-570 Circumstances for which an amended certificate of need is required. (1) An amended certificate of need shall be required for any of the following modifications of a project for which a certificate of need was issued:
 - (a) An addition of a new service;
- (b) An expansion of a service beyond that which was included in the certificate of need application on which the issuance of the certificate of need was based;
 - (c) An increase in the inpatient bed capacity; or
- (d) A significant reduction in the scope of a project for which a certificate of need has been issued without a commensurate reduction in the cost of the project, or the project cost increases (as represented in bids on a construction project or final cost estimate or estimates acceptable to the person to whom the certificate of need was issued) when the total of such increases exceeds twelve percent or fifty thousand dollars, whichever is greater, over the maximum capital expenditure specified by the secretary's designee in issuing the certificate of need: *Provided however*, That the review of such reductions or cost increases shall be restricted to the continued conformance of the project with the criteria contained in WAC 248-19-380 and 248-19-400.
- (2) An application for an amended certificate of need shall be submitted in accordance with the provisions of WAC 248-19-280.
- (3) An application for an amended certificate of need may be reviewed under the expedited review process set forth in WAC 248-19-340.
- (4) The department shall, after consultation with the appropriate advisory review agencies, provide a written

determination as to the requirement for an amended certificate of need within twenty—one days after receipt of a request for such determination.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–570, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), § 248–19–450, filed 2/28/86; 81–09–012 (Order 210), § 248–19–450, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), § 248–19–450, filed 11/30/79.]

- WAC 246-310-580 Validity and extensions. (1) A certificate of need shall be valid for two years: *Provided*, That one six-month extension may be made if it can be substantiated that substantial and continuing progress toward commencement of the project has been made.
- (2) In the case of a project involving construction, substantial and continuing progress shall include one of the following:
- (a) When review and approval by the department of the final plans for construction is required, the submission of working drawings;
- (b) When plan approval is not required by the department, receipt of copies of the working drawings for construction.
- (3) A project for which a certificate of need has been issued shall be commenced during the validity period for the certificate of need.
- (4) Applications for extensions of the validity period of certificates of need shall be submitted simultaneously to the department and the appropriate advisory review agencies, at least one hundred twenty calendar days before the expiration of the certificate of need, and shall contain such information as may be required by the department to determine the extent of progress toward commencement of construction or other action necessary to a project.
- (5) An application for an extension of a certificate of need submitted less than one hundred twenty calendar days before the expiration of the certificate of need shall not be reviewed, unless the applicant can demonstrate to the satisfaction of the department unforeseen occurrences during the last one hundred twenty days of the validity period of the certificate of need prevented commencement of construction as previously anticipated by the applicant.
- (6) Commencement of the project shall not be undertaken after the expiration of the certificate of need unless a new certificate of need application has been reviewed and a new certificate of need has been issued by the secretary's designee.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–580, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), § 248–19–460, filed 2/28/86. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), § 248–19–460, filed 11/30/79.]

WAC 246-310-590 Monitoring of approved projects. (1) The department, in cooperation with the advisory review agencies, shall monitor the costs and components of approved projects so as to assure conformance with certificates of need that have been issued.

- (2) The department shall require periodic progress reports from those applicants to whom certificates of need have been issued.
- (a) Progress reports shall be required at least annually and at no greater frequency than quarterly.
- (b) Progress reports shall be submitted in the form and manner prescribed and published by the department.
- (3) Information required on approved projects may include:
 - (a) Actual project costs;
 - (b) Changes in the project;
- (c) Financing arrangements, different than approved under the certificate of need;
 - (d) Project commencement date;
 - (e) Progress toward completion of construction; and
 - (f) Project completion date.
- (4) The information required on approved projects may vary according to the nature of the projects.
- (5) Progress reports on a project for which a particular certificate of need has been issued shall terminate when the project has been completed and the department finds it has received all the information necessary to determine the project has been completed in accordance with the certificate of need which had been issued and the provisions of chapter 248–19 WAC.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-590, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86-06-030 (Order 2344), § 248-19-470, filed 2/28/86. Statutory Authority: Chapter 70.38 RCW. 79-12-079 (Order 188), § 248-19-470, filed 11/30/79.]

- WAC 246-310-600 Withdrawal of a certificate of need. (1) The secretary's designee may withdraw a certificate of need if the department determines, after consultation with the appropriate advisory review agencies, that the holder of a certificate is not meeting the timetable specified in the certificate of need application for making services or equipment available or completing the project and is not making a good-faith effort to meet such timetable.
- (2) In reviewing a proposed withdrawal of a certificate of need, the department shall adhere to the provisions of WAC 248-19-310, 248-19-320, 248-19-326, and 248-19-430.
- (3) The review period for a proposed withdrawal of a certificate of need shall not exceed ninety days unless extended by the department to allow sufficient time for the conduct of a public hearing pursuant to the provisions of WAC 248–19–320. The review period of the appropriate advisory review agencies shall not exceed sixty days unless extended by the department at the written request of the regional health council to allow sufficient time for the conduct of a public hearing pursuant to the provisions of WAC 248–19–320. Such extension shall not exceed thirty days.
- (4) The findings of the department's review of a proposed withdrawal of a certificate of need shall be stated in writing and include the basis for the decision of the secretary's designee as to whether the certificate of need is to be withdrawn for a proposed project. A copy of the

department's written findings and statement of the decision of the secretary's designee on the proposed withdrawal of a certificate of need shall be sent to:

- (a) The holder of the certificate of need;
- (b) The regional health council for the health service area in which the proposed project is to be located;
- (c) The hospital commission, if the proposed project is for a hospital; and
- (d) In the case of a project proposed by a health maintenance organization, the appropriate regional office of the United States Department of Health and Human Services.
- (5) The written findings and statement of the decision of the secretary's designee on the proposed withdrawal of a certificate of need shall be available to others requesting the certificate of need unit to provide access to a copy of such findings and statement.
- (6) The department shall send to the appropriate regional health council a detailed, written statement as to the reasons why a decision which the secretary's designee has made is inconsistent with any of the following:
- (a) The regional health council's recommendation as to the action to be taken;
- (b) The goals of the applicable regional health plan; or
- (c) The priorities of the applicable annual implementation plan.
- (7) When a certificate of need is for multiple services or multiple components or the proposed project is to be multiphased, the secretary's designee may take individual and different action regarding withdrawal of the certificate of need on separable portions of the certificate of need.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–600, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), § 248–19–475, filed 2/28/86; 81–09–012 (Order 210), § 248–19–475, filed 4/9/81, effective 5/20/81.]

WAC 246-310-610 Adjudicative proceeding. (1) An applicant denied a certificate of need or a certificate holder whose certificate was suspended or revoked has the right to an adjudicative proceeding.

- (2) A certificate applicant or holder contesting a department certificate decision shall within twenty-eight days of receipt of the decision:
- (a) File a written application for an adjudicative proceeding by a method showing proof of receipt with the Office of Appeals, P.O. Box 2465, Olympia, WA 98504; and
 - (b) Include in or with the application:
- (i) A specific statement of the issue or issues and law involved;
- (ii) The grounds for contesting the department decision; and
 - (iii) A copy of the contested department decision.
- (3) The proceeding is governed by the Administrative Procedure Act (chapter 34.05 RCW), this chapter, and chapter 248-08 WAC. If a provision in this chapter conflicts with chapter 248-08 WAC, the provision in this chapter governs.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \$ 246–310–610, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 34.05 RCW, RCW 34.05.220 (1)(a), 70.38.135 and 1989 1st ex.s. c 9 \$ 607. 90–06–019 (Order 039), \$ 248–19–480, filed 2/28/90, effective 3/1/90. Statutory Authority: RCW 70.38.135. 86–06–030 (Order 2344), \$ 248–19–480, filed 2/28/86; 82–19–055 (Order 244), \$ 248–19–480, filed 9/15/82; 81–09–012 (Order 210), \$ 248–19–480, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79–12–079 (Order 188), \$ 248–19–480, filed 11/30/79.]

WAC 246-310-620 Certificate of need program reports. (1) The department shall prepare and publish annual reports containing information on certificate of need reviews in progress, reviews completed in the preceding twelve month period, and a general statement of the findings and decisions made in the course of those reviews.

(2) Upon request, the department shall provide notification to health care facilities and to other persons of the status of the department's review of projects subject to review and the findings made in the course of such review.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-620, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 81-09-012 (Order 210), § 248-19-490, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79-12-079 (Order 188), § 248-19-490, filed 11/30/79.]

WAC 246-310-630 Public access to records. The general public shall have access in accordance with the provisions of chapter 42.17 RCW to all applications reviewed by the department and to all other written materials essential to any review by the department pursuant to the provisions of chapter 248-19 WAC.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-310-630, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.38.135. 81-09-012 (Order 210), § 248-19-500, filed 4/9/81, effective 5/20/81. Statutory Authority: Chapter 70.38 RCW. 79-12-079 (Order 188), § 248-19-500, filed 11/30/79.]

WAC 246-310-990 Certificate of need review fees. (1) An application for a certificate of need under chapter 248-19 WAC shall include payment of a fee consisting of the following:

- (a) An application processing fee in the amount of seven hundred fifty dollars which shall not be refundable;
- (b) A review fee based on the project description and the total capital expenditure.

Project Description	Capital Exp	enditure Range	Review Fee
Additional kidney disease treatment center stations	\$ 0 100,001 250,001	- \$ 100,000 - 250,000 or more	\$ 4,300 5,700 7,600
Administrative or emergency review Amendment to a certi-	0 250,001	- 250,000 or more	5,400 8,100 5,000
ficate of need Bed addition of less than 10 beds	0 100,001 5,000,001	- 100,000 - 5,000,000	4,300 5,700 7,600
Bed addition of 10 beds or more	0 500,001 5,000,001	or more - 500,000 - 5,000,000 or more	8,100 11,900 15,700

Project Description	Capital Expe	nditure Range	Review Fee
Bed redistribution or bed relocation	0 100,001 2,000,001	- 100,000 - 2,000,000 or more	7,000 10,600 13,200
Capital expenditure over the minimum expenditure	Exp. min. 5,000,001 10,000,001	- 5,000,000 - 10,000,000 or more	7,600 9,600 13,600
Establishment of a new hospital, nursing home, or continuing care retirement community	0 2,000,001	- 2,000,000 or more	10,600 15,700
Establishment of a new home health agency, hospice, ambulatory surgery facility, or kidney disease treat— ment center	0 1 100,001	- 100,000 or more	3,700 5,700 7,600
Extension of the certificate of need validity period (pro-jects involving plans review by construction review unit)			150
Extension of the cer- tificate of need validity period (other projects)			900
Replacement of an existing health care facility	1 2,000,001 5,000,001	- 2,000,000 - 5,000,000 or more	5,400 8,100 9,600
Sale, purchase, or lease of part or all of an existing hospital	5,000,001	- 5,000,000 or more	7,600 11,500
Substantial change in services, or offering a new tertiary health service	0 100,001 2,000,001	- 100,000 - 2,000,000 or more	8,100 10,600 15,700
Transfer of a cer- tificate of need		t ka t	2,700

- (c) A nonrefundable two thousand dollar actuarial review fee surcharge for an application sponsored by an existing or proposed continuing care retirement community (CCRC) as defined in WAC 248-19-328 (3)(b).
- (2) For purposes of subsection (1)(b) of this section, "total capital expenditure" means the total project costs to be capitalized according to generally accepted accounting principles consistently applied, and includes, but is not limited to, the following:
 - (a) Legal fees;
 - (b) Feasibility studies;
 - (c) Site development;
 - (d) Soil survey and investigation;
 - (e) Consulting fees;
 - (f) Interest expenses during construction;
 - (g) Temporary relocation;
 - (h) Architect and engineering fees;
 - (i) Construction, renovation, or alteration;
 - (j) Total costs of leases of capital assets;
 - (k) Labor;
 - (l) Materials;
 - (m) Equipment;
 - (n) Sales taxes;
 - (o) Equipment delivery; and
 - (p) Equipment installation.

- (3) Where more than one project description under subsection (1)(b) of this section applies to an application, the applicant shall use the project description and capital expenditure range with the highest review fee in calculating the payment to accompany the application submittal.
- (4) The applicant shall accompany the submittal of an amendment to a certificate of need application with a fee consisting of the following:
- (a) A nonrefundable processing fee of five hundred dollars;
- (b) When the amendment increases the capital expenditure, or results in a project description with a larger review fee, an additional review fee based on the difference between the review fee previously paid when the application was submitted and the review fee applicable to the greater capital expenditure or new project description; and
- (c) When the amendment decreases the capital expenditure, or results in a project description with a smaller review fee, the department shall refund to the applicant the difference between the review fee previously paid when the application was submitted and the review fee applicable to the smaller capital expenditure or new project description.
- (5) When an application for a certificate of need is returned by the department in accordance with the provisions of WAC 248-19-280 (2)(b) or (e), the department shall refund all review fees paid.
- (6) When an applicant submits a written request to withdraw an application before the beginning of review, the department shall refund any review fees paid by the applicant.
- (7) When an applicant submits a written request to withdraw an application after the beginning of review, but before the beginning of the ex parte period as determined by the department consistent with WAC 248-19-326, the department shall refund one-half of all review fees paid.
- (8) When an applicant submits a written request to withdraw an application after the beginning of the exparte period as determined by the department consistent with WAC 248-19-326, the department shall not refund any of the review fees paid.
 - (9) Other certificate of need program fees are:
- (a) A nonrefundable two hundred fifty dollar processing fee for each request for an exemption from certificate of need review submitted under the provisions of WAC 248-19-405; and
- (b) A nonrefundable two hundred fifty dollar processing fee for each request for an exemption from certificate of need review submitted under the provisions of RCW 70.38.105 (4)(d).

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–310–990, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.38 RCW. 90–15–001 (Order 070), § 440–44–030, filed 7/6/90, effective 8/6/90. Statutory Authority: RCW 43.20A.055. 89–21–042 (Order 2), § 440–44–030, filed 10/13/89, effective 11/13/89; 87–16–084 (Order 2519), § 440–44–030, filed 8/5/87; 87–12–049 (Order 2494), § 440–44–030, filed 6/1/87; 84–13–006 (Order 2109), § 440–44–030, filed 6/7/84; 83–21–015 (Order 2037), § 440–44–030, filed 10/6/83. Statutory Authority: 1982 c 201. 82–13–011 (Order 1825), § 440–44–030, filed 6/4/82.]

Chapter 246–314 WAC FACILITY CONSTRUCTION REVIEW

WAC

246-314-001 Purpose, 246-314-010 Definitions.

246-314-990 Construction review fees.

WAC 246-314-001 Purpose. The purpose of this chapter is to establish fees to recover the cost of reviewing and approving health and residential care facility construction projects.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-314-001, filed 12/27/90, effective 1/31/91.]

WAC 246-314-010 Definitions. (1) "Department" means the Washington state department of health.

- (2) "Project" means a construction endeavor including new construction, replacement, alterations, additions, expansions, conversions, improvements, remodeling, renovating, and upgrading of the following types of facilities:
- (a) "Adult residential rehabilitation center" as defined under chapters 71.12 RCW and 246-325 WAC;
- (b) "Boarding homes" as defined under chapters 18-.20 RCW and 246-316 WAC;
- (c) "Maternity homes" and "childbirth centers" as defined under chapters 18.46 RCW and 246-329 WAC;
- (d) "Nursing homes" as defined under chapters 18.51 RCW and 248-14 WAC;
- (e) "Private psychiatric hospitals" as defined under chapters 71.12 RCW and 246-322 WAC;
- (f) "Private alcoholism hospitals" as defined under chapter 71.12 RCW;
- (g) "Private alcoholism treatment facilities" as defined under chapters 71.12 RCW and 246-326 WAC;
- (h) "Residential treatment facilities for psychiatrically impaired children and youth" as defined under chapters 71.12 RCW and 246-323 WAC;
- (i) "Hospitals" as defined under chapters 70.41 RCW and 246-318 WAC; and
- (j) "Hospice care center" as defined under chapters 70.41 RCW and 246-321 WAC.
- (3) "Project sponsor" means the person, persons or organization, planning and contracting for the design and construction of facilities, generally the owner or the owner's representative.
- (4) "Project cost" means all costs, except taxes, directly associated with the project, initially estimated and corrected by certification to the date of completion of the project and including:
- (a) All architectural-engineering designs, plans, drawings, and specifications;
- (b) All fixed and installed equipment in the project; and
 - (c) Contractor supervision, inspection, and overhead.

[Statutory Authority: RCW 43.70.040. 91–02–050 (Order 122), $\$ 246–314–010, filed 12/27/90, effective 1/31/91.]

WAC 246-314-990 Construction review fees. (1) The project sponsor shall submit to the department:

- (a) A completed project review application form along with project documents for review; and
- (b) The appropriate fee based upon the initial project construction cost as determined from the following construction fee table:

CONSTRUCTION FEE TABLE

Project Cost		Pro	oject	Review	Fee
\$ 0 to	\$	499	6	60	
500 to)	999		120	
1,000 to) 1	,900		180	
2,000 to) 2	2,999		240	
3,000 to) 4	,999		300	
5,000 to	9	,999		360	
10,000 to	19	,000		480	
20,000 to	29	0,000		600	
30,000 to		,999		720	
40,000 to		,999		840	
50,000 to		1,999		960	
65,000 to	79	,999		1,080	
80,000 to		,999		1,200	
100,000 to		,999		1,500	
125,000 to		,999		1,800	
150,000 to		,999		2,100	
200,000 to		,999		2,400	
250,000 to		1,999		2,700	
325,000 to		,999		3,000	
450,000 to		,999		3,300	
575,000 to		,999		3,600	
700,000 to		,999		4,200	
850,000 to		,999		4,800	
1,000,000 to				5,400	
1,250,000 to				6,000	
2,500,000 to				6,600	
3,000,000 to				7,200	
3,500,000 to		•		7,800	
5,000,000 to				9,000	
7,000,000 to				10,200	
10,000,000 to				11,400	
15,000,000 to				13,200	
20,000,000 to				15,000	
30,000,000 to		,999		16,800	
40,000,000 a	nd over			19,200	

- (2) The department shall charge a flat fee of sixty dollars for a project involving installation of carpet only.
- (3) The project sponsor may request a reduction in the project review fee for fixed or installed technologically advanced diagnostic or treatment equipment projects including lithotripters, CT scans, linear accelerators, or MRI's.
- (4) The department may adjust the project review fee if:
- (a) The final project cost changes as evidenced on the certificate of project completion card; or
- (b) The project sponsor requests a reduction in the fee according to subsection (3) of this section.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-314-990, filed 12/27/90, effective 1/31/91.]

Chapter 246-316 WAC BOARDING HOMES

WAC	
246-316-001	Legal authority of the department.
246-316-010	Definitions.
246-316-020	Boarding home license application—Department denial, suspension, revocation of license.
246-316-030	Change of licensee.
246-316-040	Requirement for and qualifications of boarding home administrator.
246-316-050	Staff and employees—Other persons living in boarding home.
246-316-060	HIV/AIDS education and training.
246–316–070	New construction—Modification of existing structure.
246-316-080	Communication system.
246-316-090	Water supply.
246-316-100	Sewage and liquid waste disposal.
246-316-110	Garbage and refuse disposal.
246-316-120	Lighting.
246-316-130	Heating—Temperature.
246-316-140	Ventilation.
246-316-150	Resident room—Room furnishings—Storage.
246-316-160	Toilet and bathing facilities.
246-316-170	Food and nutrition services.
246-316-180	Day rooms.
246-316-190	Laundry.
246-316-200	Storage space.
246-316-210	Stairs—Ramps.
246-316-220	Guardrails, handrails.
246-316-230	Maintenance and housekeeping.
246-316-240	Admission, placement and retention of residents.
246-316-250	Boarding home resident rights.
246-316-260	Boarding home resident services.
246-316-270	First aid services.
246-316-280	Notification regarding serious or significant change i resident's condition.
246-316-290	Safety measures.
246-316-300	Medication services.
246-316-310	Resident register.
246-316-320	Resident health record.
246-316-330	Adult day care.
246-316-340	Exemptions.
246_316_990	Fees

WAC 246-316-001 Legal authority of the department. See RCW 18.20.090.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-316-001, filed 12/27/90, effective 1/31/91. Statutory Authority: 1985 c 213. 86-08-002 (Order 2348), § 248-16-999, filed 3/20/86; Regulation .16.999, effective 3/11/60.]

- WAC 246-316-010 Definitions. For the purposes of these regulations, the following words and phrases shall have the following meanings unless the context clearly indicates otherwise.
- (1) "Abuse" means the injury, sexual use or sexual mistreatment of an individual resident by any person under circumstances which indicate the health, welfare, and safety of the resident is harmed thereby. Abuse includes emotional, as well as physical, abuse.
- (a) "Physical abuse" means damaging or potentially damaging nonaccidental acts or incidents which may result in bodily injury or death.
- (b) "Emotional abuse" means verbal or nonverbal actions which constitute harassment.
- (2) "Ambulatory" means physically and mentally capable of walking or traversing a normal path to safety,

- including the ascent and descent of stairs, without the physical assistance of another person.
- (a) "Semi-ambulatory" means physically and mentally capable of traversing a normal path to safety with the use of mobility aids, but unable to ascend or descend stairs without the physical assistance of another person.
- (b) "Nonambulatory" means physically or mentally unable to walk or traverse a normal path to safety without the physical assistance of another person.
- (c) "Physical assistance" as used in subsection (2)(a) and (b) of this section means carrying, pushing, pulling, holding, or dragging a resident along a normal path to safety.
- (3) "Area," except when used in reference to a major section of a boarding home, means a portion of a room which contains the equipment essential to carry out a particular function and is separated from other facilities of the room by a physical barrier or adequate space.
- (4) "Bathing facility" means a bathtub, shower or sit—down shower.
- (5) "Bathroom" means a room containing at least one bathing facility.
- (6) "Board" as used in RCW 18.20.020(2) means the provision of daily meal service and lodging.
 - (7) "Boarding home" means:
- (a) A facility as defined in RCW 18.20.020(2) and in this chapter;
- (b) The licensee or person granted a license by the department to operate a boarding home.
- (8) "Department" means the Washington state department of social and health services (DSHS).
- (9) "Dietitian" means an individual meeting the eligibility requirements for active membership in the American dietetic association described in Directory of Dietetic Programs Accredited and Approved, American Dietetic Association, edition 100, 1980.
- (10) "Domiciliary care," as used in RCW 18.20.020 and this chapter, means the care offered an individual in his or her living accommodation which includes the assumption of a general responsibility for the safety and well-being of the individual and provision of assistance in the activities of daily living, as needed.
- (11) "Facilities" means a room or area and/or equipment to serve a specific function.
- (12) "Foot candle" means a measurement of light approximately equal to the light produced by a lighted candle at the distance one foot away from the candle.
- (13) "Functional abilities" means the physical, mental, emotional and social abilities to cope with the affairs and activities of daily living.
- (14) "Grade" means the level of the ground adjacent to the building measured at required windows with ground level or sloping downward for a distance of at least ten feet from the wall of the building.
- (15) "Health care practitioner" means any individual, group or organization providing health care as authorized by Washington state law, including, but not limited to, physician, chiropractor, naturopath, certified registered nurse, physician's assistant.

- (16) "Home health care agency" means any nursing or other service provided by licensed nurses, other practitioners or aides on a periodic or short-term basis excluding continuous nursing care.
- (17) "Infirmity," as used in RCW 18.20.020 and this chapter, means a disability which materially limits normal activity without causing an individual to need inpatient medical or nursing care of a type provided by institutions licensed under the provisions of chapters 18.46, 18.51, 70.41 or 71.12 RCW. An infirmity may be based on conditions including, but not limited to, physical handicap, mental illness, developmental disability, chemical addiction or habituation or mental confusion, disability or disturbance.
- (18) "Lavatory" means a plumbing fixture designed and equipped to serve for handwashing purposes.
- (19) "May" means to permit, at the discretion of the department.
- (20) "Medication" means all pharmaceuticals, vitamins, and nutrient supplements, both over-the-counter and prescribed.
- (21) "Medication administration" means an act in which a single dose of a medication is given to a resident by an authorized person, other than the resident, under laws and regulations governing such acts and entailing:
- (a) Removing an individual dose from a previously dispensed, properly labeled container;
- (b) Reviewing the label on the container with prescriber's order or with a direct copy of a verified transcription of the order;
- (c) Giving an individual dose to the proper resident;
 - (d) Properly recording the time and dose given.
 - (22) "Minor alteration" means:
- (a) Physical or functional modification in a boarding home without changing department-approved use of the modified room or area; and
- (b) Prior department review of the plan specified in WAC 248-16-055 is not required.
- (23) "Neglect" means negligent treatment or maltreatment; an act or omission which evinces a disregard of consequences of such a magnitude as to constitute a clear and present danger to a resident's health, welfare, and/or safety.
 - (24) "New construction" means:
- (a) Constructing or building a new physical plant or facility to be used as a boarding home;
- (b) Additions to an existing facility or physical plant constructed for intended use as part of a boarding home;
- (c) A physical alteration, modification, or renovation changing department-approved use of a room or area excluding "minor alteration."
- (25) "Nurse" means either a licensed practical nurse under provisions of chapter 18.78 RCW or a registered nurse.
 - (26) "Nursing care" means services:
- (a) Designed to maintain or promote achievement of optimal, independent function, and health status; and
- (b) Planned, supervised, and evaluated by a registered nurse in the context of an overall individual plan of care as in WAC 248-14-001.

- (27) "Physician" or "doctor," as used in RCW 18.20-.160 and in this chapter, means an individual licensed as a physician under chapters 18.57 or 18.71 RCW.
- (28) "Prescriber" means a physician, dentist under chapter 18.32 RCW, or registered nurse with prescriptive authority or others legally authorized in Washington state to prescribe drugs.
- (29) "Registered nurse" means an individual licensed under chapter 18.88 RCW.
- (30) "Resident" means an individual who, by reason of age or infirmity, requires domiciliary care and who is not related by blood or marriage to the operator of the boarding home.
- (31) "Room" means a space set apart by floor to ceiling partitions on all sides with all openings provided with doors or windows.
- (32) "Self-administration of medication" means medication administration by a resident taking his or her own medication from a properly labeled container.
- (33) "Sit-down shower" means a shower which has a molded seat, fold-down type of seat, or an equivalent means for sitting and is designed for bathing while in a sitting position.
- (34) "Suitable chair" means a piece of furniture intended to accommodate the act of sitting which is sturdy, comfortable, and appropriate for the age and physical condition of a resident.
- (35) "Supervised medication service Category A" means:
- (a) A level of self-medication or self-administration; or
- (b) Self-directed medication service for a resident requiring limited assistance or no assistance, and monitoring by boarding home staff to assure medication is taken and stored properly.
- (36) "Supervised medication service Category B" means a level of service for residents requiring assistance and monitoring by boarding home staff to assure:
- (a) Medications taken in accordance with a health care practitioner's instructions; and
 - (b) Inaccessibility of medications to other residents.
- (37) "Supervised medication service Category C" means a full medication administration service.
- (38) "Toilet" means a disposal apparatus consisting of a hopper, fitted with a seat and flushing device, used for urination and defecation.
- (39) "Usable floor space" means floor area available for:
- (a) Use in a resident bedroom excluding areas with ceiling height under seven feet six inches and walk-in closets if initially and continuously licensed prior to December 31, 1988; or
- (b) Living and sleeping, excluding bathrooms, toilets, toilet compartments, closets, halls, storage, or utility spaces if initially licensed after December 31, 1988.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-316-010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89-09-034 (Order 2786), § 248-16-001, filed 4/14/89; 83-13-068 (Order 264), § 248-16-001, filed 6/16/83; Order 147, § 248-16-001, filed 6/29/77; Order 97, § 248-

16-001, filed 4/5/74; § 248-16-001, filed 10/3/67; Emergency Regulation filed 8/4/67; Regulation .16.001, effective 3/11/60; Subsec. 6, Rule 1 and Subsec. 7, Rule 2, filed 5/31/61.]

WAC 246-316-020 Boarding home license application—Department denial, suspension, revocation of license. (1) Boarding home license applicants shall:

- (a) Submit appropriate, signed, completed department application forms to the department;
- (b) Apply at least thirty days prior to expiration of license for renewal;
- (c) Promptly report changes in information related to the application including identity of:
- (i) Officers and directors if operated by a legally incorporated entity; and
 - (ii) Partners if a legal partnership.
 - (2) The department shall:
- (a) Evaluate qualifications of persons named in boarding home license application prior to granting initial and subsequent licenses;
- (b) Deny, suspend, or revoke a boarding home license if the department finds persons named unqualified or unable to operate or direct operation of the facility as described in chapter 18.20 RCW and chapter 248-16 WAC:
- (c) Determine if reasonable relationship exists between any previous conviction of the applicant and ability to competently, safely oversee, or operate a boarding home;
- (d) Deny, suspend, or revoke a boarding home license if any person named:
- (i) Was previously denied a license to operate an agency for care of children, aged, ill, or infirm in Washington or elsewhere;
- (ii) Had a license to operate an agency for treatment or care of people revoked or suspended;
 - (iii) Has a record of a criminal or civil conviction for:
- (A) Operating an agency for care of aged, children, ill, or infirm without an appropriate, applicable license; or
- (B) Any crime involving physical harm to another person.
- (iv) Is identified on department abuse registry as perpetrator of substantiated abuse described in chapter 26-.44 RCW;
- (v) Committed, permitted, aided, or abetted an illegal act on boarding home premises;
- (vi) Demonstrated cruelty, abuse, negligence, assault, or indifference to welfare and well-being of a resident;
- (vii) Failed to exercise fiscal accountability and responsibility involving:
 - (A) A resident;
 - (B) The department;
 - (C) Public agencies; or
 - (D) The business community.
- (3) The department may grant a license to operate a boarding home to previously disqualified licensees as specified in subsection (2) of this section if such person provides evidence including demonstrated ability to operate a boarding home according to applicable laws and rules.

- (4)(a) The department's notice of a denial, suspension, modification, or revocation of a license shall be consistent with RCW 43.20A.XXX and section 95, chapter 175, Laws of 1989. An applicant or license holder has the right to an adjudicative proceeding to contest a license decision.
- (b) A license applicant or holder contesting a department decision shall within twenty-eight days of receipt of the decision:
- (i) File a written application for an adjudicative proceeding by a method showing proof of receipt with the Office of Appeals, P.O. Box 2465, Olympia, WA 98504; and
 - (ii) Include in or with the application:
- (A) A specific statement of the issue or issues and law involved;
- (B) The grounds for contesting the department decision; and
 - (C) A copy of the contested department decision.
- (c) The proceeding is governed by the Administrative Procedure Act (chapter 34.05 RCW), this chapter, and chapter 248–08 WAC. If a provision in this chapter conflicts with chapter 248–08 WAC, the provision in this chapter governs.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-316-020, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 34.05 RCW, RCW 34.05.220 (1)(a) and 18.20.909 [18.20.090]. 90-06-019 (Order 039), § 248-16-031, filed 2/28/90, effective 3/1/90. Statutory Authority: RCW 18.20.090. 89-09-034 (Order 2786), § 248-16-031, filed 4/14/89.]

WAC 246-316-030 Change of licensee. (1) Boarding homes shall:

- (a) Notify the department in writing at least thirty days prior to planned change of boarding home license including:
- (i) Full names of the present licensee and prospective licensee;
- (ii) Name and address of the boarding home concerned;
 - (iii) The date of the proposed change; and
- (iv) The kind of change to be made, such as sale, lease, or rental.
 - (b) If a corporation or partnership:
- (i) Notify the department, in writing, with the name and address of the responsible officers in corporation or controlling partners; and
- (ii) Submit a signed statement testifying the new controlling officer or officers is in compliance with WAC 248-16-031.
- (2) Applicants for an initial boarding home license shall submit a new application thirty days or more before proposed effective date of license as specified in WAC 248-16-031.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-316-030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89-09-034 (Order 2786), § 248-16-033, filed 4/14/89.]

WAC 246-316-040 Requirement for and qualifications of boarding home administrator. (1) Boarding

homes shall have continuous availability of an administrator or designated alternate who:

- (a) Is available in person or by phone or page at all imes:
 - (b) Is at least twenty-one years of age;
 - (c) Is not a resident as defined in WAC 248-16-001;
- (d) Possesses a high school diploma or equivalent unless administering a boarding home in Washington state prior to January 1, 1958;
- (e) Has demonstrated competence and experience in management of a boarding home or completed high school or post-high school courses including:
- (i) Basic accounting, except when a designated alternate administrator is in charge for two weeks or less;
- (ii) Management including personnel management; and
- (iii) Care of persons characteristic of those admitted or accepted as residents in a specific boarding home, such as frail elderly, developmentally disabled, or mentally ill persons.
- (f) Meets requirements as specified in WAC 248-16-046 (2)(b).
- (2) Boarding homes shall notify the department when changes in the administrator occur including:
- (a) Provide written notice to the department of new administrator's name upon appointment; and
- (b) Provide a statement of administrator's compliance with WAC 248-16-036 and 248-16-046.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–316–040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89–09–034 (Order 2786), § 248–16–036, filed 4/14/89.]

WAC 246-316-050 Staff and employees--Other persons living in boarding home. (1) Boarding homes shall provide:

- (a) Sufficient, trained staff in each boarding home to provide:
 - (i) Services and care needed by residents;
- (ii) Maintenance of the facility for resident health and safety;
 - (iii) Implementation of fire and disaster plans.
- (b) One or more staff aged eighteen years of age or older:
- (i) On boarding home premises at all times when residents are present;
- (ii) Capable of assisting all residents present in boarding home; and
- (c) Staff present and responsible for "on-premises" supervision when any resident is working as staff or employed by the boarding home unless approved in advance by the department;
- (d) Orientation and appropriate training of employees and staff pertinent to expected duties including:
 - (i) Organization of boarding home;
 - (ii) Physical facility layout;
 - (iii) Specific duties and responsibilities;
- (iv) Policies, procedures, equipment necessary to perform duties as expected, minimally including:
 - (A) Actions during emergencies;

- (B) Actions related to suspected, or alleged abuse, neglect, or accidents involving residents; and
 - (C) Methods of preventing transmission of infection.
 - (2) Boarding homes shall require and have:
 - (a) Staff with resident care duties possessing:
- (i) Current first aid cards, unless licensed nurses, from instructors certified by:
 - (A) American Red Cross; or
 - (B) American Heart Association; or
 - (C) United States Bureau of Mines; or
- (D) Washington state department of labor and industries.
- (ii) Current cardiopulmonary resuscitation cards from instructors certified as in subsection (2)(a)(i)(A), (B), (C), and (D) of this section.
- (b) A written statement from all staff and persons other than residents living or working in a boarding home regarding:
 - (i) Convictions for felony;
- (ii) Convictions for crimes involving physical harm to another; and
- (iii) Previous perpetrator of substantiated abuse as described in chapter 26.44 RCW.
- (c) Exclusion of persons other than residents from living or working on the premises when evidence indicates previous conviction or abuse, as in subsection (2)(b) of this section, unless the boarding home licensee:
- (i) Determines such person is rehabilitated enough to warrant public trust; and
 - (ii) Records the facts and basis for decision.
- (3) Boarding homes shall reassign and/or restrict staff contact with residents when:
- (a) Staff have a known communicable disease in the infectious stage; and
- (b) The disease is likely to be spread in the boarding home setting or by casual contact.
 - (4) Boarding homes shall maintain documentation of:
- (a) Staff orientation and training pertinent to duties, including cardiopulmonary resuscitation and first aid if required in subsection (2)(a) of this section; and
- (b) Individual staff statements related to conviction or abuse and related boarding home actions as required in subsection (2)(b) and (c) of this section.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–316–050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89–09–034 (Order 2786), § 248–16–046, filed 4/14/89.]

WAC 246-316-060 HIV/AIDS education and training. Boarding homes shall:

- (1) Verify or arrange for appropriate education and training of personnel on the prevention, transmission, and treatment of human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) consistent with RCW 70.24.310; and
- (2) Use infection control standards and educational material consistent with the approved curriculum manual Know HIV/AIDS Prevention Education for Health Care Facility Employees, May 31, 1989, published by the office on HIV/AIDS.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–316–060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.24.310. 89–21–038 (Order 3), § 248–16–048, filed 10/12/89, effective 11/12/89.]

WAC 246-316-070 New construction—Modification of existing structure. (1) Boarding homes shall forward plans for new construction, if applicable, to the department including:

- (a) Preliminary documents with:
- (i) Description of program, services, and operational methods affecting boarding home building, premises, or residents;
- (ii) Scaled drawings for any physical or functional construction or modification;
 - (iii) Two sets of plans drawn to scale including:
 - (A) Plot plan showing streets and driveways;
 - (B) Water supply;
 - (C) Sewage disposal system;
 - (D) Grade and location of each building;
 - (E) Designated function of each room; and
 - (F) Fixed equipment.
 - (iv) General description of construction and materials.
- (b) Final construction documents requiring department approval which are two sets of final plans and specifications including:
 - (i) Plot plans;
- (ii) Plans for each floor of each affected building designating function for each room and fixed equipment;
- (iii) Interior and exterior elevations, building sections, and construction details;
- (iv) A schedule of floor, wall, and ceiling finishes and the type and size of doors and windows;
- (v) Plumbing, heating, ventilating, and electrical systems;
- (vi) Specifications which fully describe workmanship and finishes; and
- (vii) A sample of each different carpet, if provided, including tests for flame spread and smoke density conducted by an independent testing laboratory approved by the department.
- (2) Boarding homes involved in new construction projects shall:
- (a) Obtain department approval of final construction documents prior to starting construction;
- (b) Consult with the department prior to changing approved plans and specifications;
- (c) Submit modified plans or addenda if required by the department;
- (d) Construct only changes approved by the department;
- (e) Provide a written notice of construction project completion to the department indicating date to be completed and compliance with requirements of chapter 18-.20 RCW and chapter 248-16 WAC; and
- (f) Occupy and use buildings or rooms only after authorization by the department.
- (3) When modifications or alterations to existing boarding home structure are planned, boarding homes shall forward plans to the department including:
 - (a) Preliminary documents with:

- (i) Descriptive drawings of each floor of proposed modifications indicating area to be modified;
- (ii) Description of impacts on physical plant, operations, and services;
- (iii) A plan showing existing and proposed function of each room and fixed equipment; and
- (iv) A sample of carpets, if provided, including tests for flame spread and smoke density conducted by an independent testing laboratory approved by the department.
- (b) Final plans submitted after department review of preliminary documents.
- (4) Boarding homes involved in alteration or modification projects shall:
- (a) Begin modifications only after department approval of final plans; and
- (b) Make adequate provisions for the health, safety, and comfort of residents during construction.
- (5) Boarding homes shall obtain approval of the Washington state division of fire protection prior to new construction, modifications, alterations, and minor alterations under RCW 18.20.130.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–316–070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89–09–034 (Order 2786), § 248–16–057, filed 4/14/89.]

WAC 246-316-080 Communication system. Boarding homes shall provide:

- (1) One or more nonpay telephones in each building located for ready access by staff;
- (2) Intercoms, phone extensions, or other means of communications as required for maintaining resident safety;
- (3) Resident access to one or more pay or nonpay telephones on the premises.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–316–080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89–09–034 (Order 2786), § 248–16–060, filed 4/14/89; 83–13–068 (Order 264), § 248–16–060, filed 6/16/83; Order 147, § 248–16–060, filed 6/29/77; Regulation .16.060, effective 3/11/60.]

WAC 246-316-090 Water supply. Boarding homes shall:

- (1) Provide a water supply system and water meeting requirements described in chapter 248-54 WAC public water supplies;
- (2) Maintain water supply systems free of cross-connections;
- (3) Provide hot and cold water under adequate pressure readily available throughout the facility;
- (4) Provide hot water not to exceed 120° Fahrenheit at lavatories and bathing facilities used by residents;
- (5) Label or color code unsafe or nonpotable water supplies used for irrigation, fire protection, and purposes other than domestic use;
- (6) Meet laundry requirements of WAC 248-16-160; and
- (7) Meet dishwashing machine requirements in WAC 248-16-141.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–316–090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89–09–034 (Order 2786), § 248–16–070, filed 4/14/89; 83–13–068 (Order 264), § 248–16–070, filed 6/16/83; Order 147, § 248–16–070, filed 6/29/77; Regulation .16.070, effective 3/11/60.]

WAC 246-316-100 Sewage and liquid waste disposal. Boarding homes shall:

- (1) Have all sewage and waste water drain into a sewerage system approved by the governmental agency having jurisdiction;
- (2) Prevent discharge of sewage or liquid wastes directly on the surface of the ground or directly into ground water; and
- (3) For new construction, if on-site sewage disposal systems are used, discharge sewage and liquid wastes per chapter 248-96 WAC on-site sewage disposal or chapter 173-240 WAC.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-316-100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18,20.090. 89-09-034 (Order 2786), § 248-16-080, filed 4/14/89; Order 147, § 248-16-080, filed 6/29/77; Regulation .16.080, effective 3/11/60.]

WAC 246-316-110 Garbage and refuse disposal. Boarding homes shall:

- (1) Provide garbage containers which are:
- (a) In a suitable location or storage area;
- (b) Sufficient in number;
- (c) Constructed to be nonabsorbent and water-tight;
- (d) Appropriately maintained; and
- (e) Cleaned frequently to prevent presence of vectors, odors, and other nuisances.
- (2) Dispose of garbage and wastes at sufficient frequent intervals to prevent hazards and nuisances; and
- (3) Assure final disposal of garbage and refuse by use of authorized garbage collection services or other department-approved methods.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–316–110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89–09–034 (Order 2786), § 248–16–090, filed 4/14/89; 83–13–068 (Order 264), § 248–16–090, filed 6/16/83; Order 147, § 248–16–090, filed 6/29/77; Regulation .16.090, effective 3/11/60.]

- WAC 246-316-120 Lighting. Boarding homes shall maintain light fixtures and lighting to provide for comfort and safety of residents minimally to include an intensity of:
- (1) Five foot—candles of light measured thirty inches from the floor in all areas;
- (2) Thirty foot—candles of light measured at reading, work, and recreation surfaces in any room or area used by residents for reading, work, and recreation; and
- (3) Ten foot-candles of light measured thirty inches from the floor in toilet rooms and bathrooms.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-316-120, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89-09-034 (Order 2786), § 248-16-105, filed 4/14/89; 83-13-068 (Order 264), § 248-16-105, filed 6/16/83.]

- WAC 246-316-130 Heating-Temperature. Boarding homes shall:
- (1) Equip each resident-occupied building with an approved heating system capable of maintaining a healthful temperature for residents;
- (2) Prohibit use of portable space heaters unless approved, in writing, by the Washington state director of fire protection; and
- (3) Maintain a temperature during sleeping hours no less than 60° Fahrenheit and no less than 68° Fahrenheit during waking hours except when:
- (a) A room is designated for activities requiring physical exertion; or
- (b) Individual residents can control temperature in their own unit, independent from other areas.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-316-130, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89-09-034 (Order 2786), § 248-16-110, filed 4/14/89; 83-13-068 (Order 264), § 248-16-110, filed 6/16/83; Order 147, § 248-16-110, filed 6/29/77; Regulation .16.110, effective 3/11/60.]

WAC 246-316-140 Ventilation. Boarding homes shall:

- (1) Ventilate rooms to prevent excessive odors or moisture;
- (2) Designate and maintain appropriately ventilated smoking areas to prevent air contamination throughout the facility if smoking is permitted in a boarding home;
- (3) Provide insect screens for operable windows or openings serving for ventilation; and
- (4) Avoid using a type of screen which might restrict or hinder escape or rescue in emergencies if a screen is used in a fire or emergency exit opening.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-316-140, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89-09-034 (Order 2786), § 248-16-115, filed 4/14/89; 83-13-068 (Order 264), § 248-16-115, filed 6/16/83.]

WAC 246-316-150 Resident room-Room furnishings-Storage. (1) Boarding homes shall have resident sleeping rooms with:

- (a) Eighty square feet usable floor space in a oneperson room;
- (b) At least seventy square feet of usable floor space per person in rooms occupied by two or more;
- (c) Ceiling heights of at least seven feet six inches over all portions of rooms considered usable floor space;
- (d) Accommodations for a maximum of four persons per room if initially and continuously licensed before July 1, 1989;
- (e) Maximum occupancy of two persons per room for boarding homes applying for initial license or increasing number of resident sleeping rooms after June 30, 1989;
- (f) Appropriate room identification and resident capacity consistent with department-approved list;
- (g) Unrestricted direct access to a hallway, living room, outside, or other acceptable common—use area;
 - (h) An exclusion for use as corridors or passageways;

- (i) Window sill or sills of a window or windows used for required window area, under subsection (1)(j) of this section:
- (i) No more than three feet eight inches from the floor;
- (ii) At or above grade extending ten or more feet outside horizontally from the window sill.
- (j) Windows, excluding openings into window wells, enclosed porches, light or ventilation shafts, or similarly enclosed areas, providing:
- (i) Clear glass area at least one-tenth of required room area;
 - (ii) Minimum area of ten square feet.
- (k) Windows designed to operate freely if necessary for fire exit or ventilation;
- (l) Adjustable window curtains, shades, blinds, or equivalent for visual privacy;
- (m) One or more duplex electrical outlets per bed if initially licensed after July 1, 1983;
- (n) Switch at entry of bedroom to control one or more light fixtures in room;
- (o) Artificial lighting at bedside if requested by a resident under WAC 248-16-105; and
 - (p) Noncombustible wastebaskets.
- (2) Boarding homes shall provide or ensure each resident has:
- (a) Sufficient storage facilities either in or immediately adjacent to his or her sleeping room to adequately store a reasonable quantity of clothing and personal possessions;
 - (b) Individual towel and washcloth rack or equivalent;
- (c) A secure space for valuables at least one-half cubic foot and a minimum dimension of four inches if requested by the resident;
- (d) A comfortable bed appropriate for size of resident and at least thirty-six inches wide with:
 - (i) A mattress which:
 - (A) Fits the bed frame;
 - (B) Is in good condition; and
- (C) Is at least four inches thick unless otherwise requested or necessary for resident health and/or safety.
- (ii) Spacing at least three feet from the other beds unless otherwise requested by all affected residents; and
 - (iii) Acceptable types including:
 - (A) Standard household bed;
 - (B) Studio couch;
 - (C) Hide-a-bed;
 - (D) Day bed; and
- (E) Water bed if it is structurally and electrically safe.
 - (e) One or more comfortable pillows;
- (f) Clean, and in good repair, bedding at least one time per week, or as necessary to maintain cleanliness;
- (g) Clean towels and washcloths at least once each week or more often if necessary to maintain cleanliness; and
- (h) At least one suitable chair excluding those used to permanently furnish the day room, dining room, or other common—use rooms.

- (3) Boarding homes may permit a resident to use his or her own furniture and furnishings when consistent with health and safety of all residents including:
- (a) Cooking equipment, coffee makers, and other equipment and appliances in sleeping rooms when approved by the Washington state director of fire protection; and
- (b) Food and beverage storage and preparation area in sleeping room if maintained in a sanitary condition.
 - (4) Boarding homes shall regularly:
- (a) Ascertain functional ability of residents to use cooking facilities safely; and
- (b) Take appropriate actions to prohibit resident access to cooking facilities when a resident is judged unable to cook safely, including:
 - (i) Rewire, disconnect, or remove stove or appliance;
 - (ii) Transfer of resident to another accommodation; or
- (iii) Ensure constant attendance by a responsible person when resident has access to or use of cooking facilities.
- (5) Boarding homes may use and allow use of carpets or other floor coverings if:
- (a) Securely fastened to the floor or provided with nonskid backing;
- (b) Free of hazards such as curling edges or tattered sections; and
 - (c) Clean.
- (6) If a boarding home plans to install carpeting, the boarding home shall submit samples to the department for approval prior to purchase and installation as required in WAC 248-16-055 (3)(a)(iv).

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-316-150, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89-09-034 (Order 2786), § 248-16-121, filed 4/14/89.]

- WAC 246-316-160 Toilet and bathing facilities. (1) Unless a private toilet and bathing facility is provided for exclusive use in each resident living unit, boarding homes shall provide common-use facilities for residents, staff, and others as follows including:
- (a) At least one toilet and one lavatory available in a ratio of one toilet and lavatory for each eight or fewer persons;
- (b) Toilet rooms containing more than one toilet reserved for use by one sex;
- (c) No more than one toilet in a room containing a bathing facility to be counted as a required toilet;
 - (d) A lavatory located in:
 - (i) Each toilet room; or
- (ii) A directly adjacent adjoining lounge, dressing room, locker room, or other suitable common-use area; or
- (iii) A resident's room if the toilet room opens into resident's room.
 - (e) Lavatories equipped with:
 - (i) Suitable mirrors;
 - (ii) Soap; and
- (iii) Single-use or disposable towels, blower, or equivalent hand-drying device.

- (f) Bathing facilities and toilets for resident use located where:
- (i) Reasonable access is possible from a common hall or area for all residents living on the same level or floor;
- (ii) Residents served live on same floor or level as toilet;
- (iii) Residents served live on same floor or level as bathing facility or no more than one floor or level up or down;
- (iv) Resident access is possible without passage through facility kitchen, pantry, food preparation, food storage, or dishwashing area; and
- (v) Access occurs without passage from one bedroom through another bedroom.
- (g) At least one bathing facility for every twelve or fewer persons; and
- (h) Bathrooms containing more than one bathing facility reserved for use by one sex only.
- (2) General requirements for all resident toilets, bathing facilities, and lavatories:
- (a) Bathing facilities designed to meet the needs of residents living in the facility;
 - (b) Toilets and bathroom facilities equipped with:
- (i) Water resistant, smooth, low gloss, nonslip, and easily cleanable materials;
 - (ii) Walls washable to height of splash or spray;
- (iii) Suitable numbers of grab bars installed and located to minimize accidental falls including:
- (A) At least one grab bar installed at each bathing facility; and
 - (B) Grab bars at toilets if needed by residents.
- (iv) Sanitarily designed plumbing fixtures in good repair with clean, nonabsorbent toilet seats free of cracks;
 - (v) Adequate lighting;
 - (vi) A suitable mirror at each lavatory; and
 - (vii) Adequate ventilation to outside.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–316–160, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89–09–034 (Order 2786), § 248–16–131, filed 4/14/89.]

- WAC 246-316-170 Food and nutrition services. (1) Boarding homes shall maintain food service facilities and practices required in chapter 248-84 WAC food service sanitation. Boarding homes may use home-canned high-acid foods with a pH of less than 4.6, such as fruit, jelly, and jam.
- (2) Boarding homes using dishwashing machines shall ensure:
- (a) Machine operation per manufacturer directions; and
- (b) "Home-type" machines, without high temperature sanitizing cycles, maintain water temperature at 155° Fahrenheit or above.
 - (3) Boarding homes shall:
- (a) Provide a minimum of three meals in each twenty-four-hour period;
- (b) Deviate from minimum of three meals in a twenty-four-hour period only following written approval by the department;

- (c) Allow no more than fourteen hours between the evening meal and breakfast unless a snack contributing to the daily nutrient total is served or made available to all residents between the evening meal and breakfast;
- (d) Provide sufficient time for residents to consume meals:
 - (e) Have written menus which:
 - (i) Are available at least one week in advance;
 - (ii) Include date, day of week, month, and year;
 - (iii) Are retained at least six months; and
- (iv) Provide a variety of foods with cycle duration of at least three weeks before repeating.
- (f) Prepare palatable, attractively served foods, meals, and nourishments sufficient in quality, quantity, and variety to meet the recommended dietary allowances of the food and nutrition board, National Research Council, 1980:
- (g) When substituting for food contributing to daily nutrient total requirement, use food of comparable nutrient value and record food actually served;
- (h) Keep a record of all food and snacks served and contributing to nutritional requirements; and
- (i) Maintain an adequate dining area approved by the department with seating capacity for fifty percent or more residents per meal setting.
 - (4) Boarding homes shall prepare and serve:
- (a) Resident specific modified or therapeutic diets when and as prescribed by a health care practitioner using a dietitian—approved menu or diet manual; and
- (b) Only nutrient concentrates and supplements prescribed in writing by a health care practitioner.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–316–170, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89–09–034 (Order 2786), § 248–16–141, filed 4/14/89.]

- WAC 246-316-180 Day rooms. Boarding homes shall provide day room area or areas for residents to participate in social, recreational, and diversional activities. Boarding homes shall provide in the day room area or areas:
- (1) Comfortable furniture and furnishings to meet resident needs;
- (2) Heat and light appropriate for the comfort of residents;
- (3) Floor space of no less than one hundred fifty square feet or ten square feet per resident, whichever is larger. Such total area may include:
 - (a) Solariums,
 - (b) Enclosed sun porches,
 - (c) Recreation rooms,
 - (d) Dining rooms, and
 - (e) Living rooms.
- (4) Floor space of no less than one hundred fifty square feet or twenty square feet per resident, whichever is larger, for boarding homes newly licensed after December 31, 1988.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–316–180, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89–09–034 (Order 2786), § 248–16–150, filed 4/14/89; 83–13–068 (Order 264), § 248–16–150, filed 6/16/83; Order 147, § 248–16–150, filed 6/29/77; § 248–16–150,

filed 10/3/67; Emergency Regulation, filed 8/4/67; Regulation .16.150, effective 3/11/60.]

- WAC 246-316-190 Laundry. (1) Boarding homes shall provide or make provision for appropriate handling, cleaning, and storage of linen and washable goods.
- (2) When facility and/or commingled personal resident laundry is washed on the premises, boarding homes shall provide, maintain, and appropriately equip a laundry room including:
- (a) Washing machines with hot water intake temperature of 140° Fahrenheit for each load;
 - (b) Means of separating clean and soiled items; and
- (c) Soiled laundry and linen storage and sorting areas in rooms other than those used for open food storage, food preparation, or food service.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-316-190, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89-09-034 (Order 2786), § 248-16-160, filed 4/14/89; 83-13-068 (Order 264), § 248-16-160, filed 6/16/83; Regulation .16.160, effective 3/11/60.]

WAC 246-316-200 Storage space. (1) Boarding homes shall provide adequate storage space for:

- (a) Supplies;
- (b) Equipment;
- (c) Linens; and
- (d) Personal possessions of residents including spaces described in WAC 248-16-121(2).
 - (2) Boarding homes shall maintain storage space to:
 - (a) Prevent fire or accident hazards; and
- (b) Provide separate, lockable storage for disinfectants and poisonous compounds in drawers, rooms, or equivalent.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-316-200, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89-09-034 (Order 2786), § 248-16-170, filed 4/14/89; 83-13-068 (Order 264), § 248-16-170, filed 6/16/83; Regulation .16.170, effective 3/11/60.]

WAC 246-316-210 Stairs—Ramps. Boarding homes providing stairways or ramps for resident use shall maintain:

- (a) Nonskid surfaces;
- (2) Step treads at least nine inches deep (run) and a maximum of eight inches high (rise); and
- (3) Ramps with a maximum slope of one to twelve (vertical to horizontal), as needed for resident safety.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-316-210, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89-09-034 (Order 2786), § 248-16-180, filed 4/14/89; 83-13-068 (Order 264), § 248-16-180, filed 6/16/83; Regulation .16.180, effective 3/11/60.]

WAC 246-316-220 Guardrails, handrails. (1) Boarding homes shall install and maintain sturdy handrails located:

- (a) In halls and corridors if conditions indicate a need;
- (b) On each side of interior and exterior stairways unless rail installation on one side:
 - (i) Maintains safety of residents; and
 - (ii) Is approved in writing by the department.
 - (c) In stairways with more than one step riser; and

- (d) On each side of interior and exterior ramps.
- (2) The department may require a boarding home to install guardrails if safety of residents is jeopardized.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-316-220, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89-09-034 (Order 2786), § 248-16-190, filed 4/14/89; 83-13-068 (Order 264), § 248-16-190, filed 6/16/83; Regulation .16.190, effective 3/11/60.]

WAC 246-316-230 Maintenance and housekeeping. Boarding homes shall provide maintenance and housekeeping including:

- (1) Safe and sanitary exterior grounds, boarding home structure, and component parts;
- (2) Clean facilities, equipment, and furnishings in good repair;
 - (3) Safe and sanitary conditions in resident bedrooms;
- (4) Provision for maintaining each resident bedroom if a resident does not keep his or her room clean and safe;
 - (5) Absence of safety hazards;
- (6) A utility sink or equivalent means of obtaining and disposing of mop water away from areas used in food preparation and food service; and
 - (7) Storage for wet mops in areas:
 - (a) mechanically ventilated; or
 - (b) Ventilated to outside air.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–316–230, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89–09–034 (Order 2786), § 248–16–202, filed 4/14/89; 83–13–068 (Order 264), § 248–16–202, filed 6/16/83; Order 147, § 248–16–202, filed 6/29/77.]

WAC 246-316-240 Admission, placement and retention of residents. (1) Prior to admission or acceptance as a resident, boarding homes shall obtain sufficient information to evaluate whether or not a resident/applicant can be safely housed and provided domiciliary care in the particular facility, including information in reference to:

- (a) Resident/applicant's ability to function with respect to the physical premises, equipment, and staff of the boarding home;
 - (b) Space, equipment, and furniture requirements;
 - (c) Ambulatory status;
- (d) Currently demonstrated overt behavior dangerous to self or others;
- (e) Need for care in a hospital, nursing home, or other licensed facility under chapters 18.51, 70.41, and 71.12 RCW;
- (f) Requirements for assistance in obtaining or administering medications; and
- (g) Need or desire for nursing care exceeding periodic visits by staff of a home health care agency or a licensed nurse employed by an individual resident.
- (2) Boarding homes shall accept, admit, and retain persons as residents only when:
- (a) Ambulatory unless the boarding home is approved by the Washington state director of fire protection to:
 - (i) Care for semi-ambulatory residents; or
- (ii) Care for nonambulatory residents not needing medical or nursing care as specified in subsection (2)(f)(ii) and (iii) of this section.

- (b) Nonsmoking residents can be accommodated with smoke-free rooms and smoke-free common-use areas to prevent contact with smoke;
- (c) Smoking residents can be accommodated by areas meeting the requirements in WAC 248-16-115(2);
 - (d) The individual resident can be accommodated by:
 - (i) Physical plant, facilities, and spaces;
 - (ii) Furniture and equipment; and
- (iii) Staff who are available and sufficient to provide nature of domiciliary care required and desired by the resident.
- (e) The amount and nature of needed assistance with medication or medication service is available in the boarding home under RCW 18.20.160 and WAC 248-16-229; and
 - (f) Individuals do not:
- (i) Exhibit continuing overt behavior which is a danger to others or self:
- (ii) Need inpatient care in a hospital, nursing home, or other facility licensed under chapters 18.51, 70.12, or 70.41 RCW; or
- (iii) Need continuous nursing care exceeding periodic or short-term services from:
 - (A) Staff of a home health care agency; or
- (B) A licensed nurse retained by an individual resident.
- (3) Upon admission or acceptance of an individual as a resident, boarding homes shall determine a resident's choice regarding:
- (a) Definite arrangements with a health care practitioner; and
 - (b) Who to call in case of resident illness or death.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \S 246–316–240, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89–09–034 (Order 2786), \S 248–16–213, filed 4/14/89; 83–13–068 (Order 264), \S 248–16–213, filed 6/16/83; Order 147, \S 248–16–213, filed 6/29/77.]

- WAC 246-316-250 Boarding home resident rights. Boarding homes shall assure each resident maintains the following rights in addition to any rights not specifically withheld by law insofar as a general or specific nuisance or a danger to the individual or others is not created:
 - (1) Rights to:
- (a) Be informed or to have a resident-designated agent informed of resident rights and the policies of the facility at the time of admission;
- (b) Have a written copy of resident rights and policies with verification of date of receipt in the resident's file or available elsewhere in the facility;
- (c) Be treated in a manner respecting individual identity, human dignity, and fostering constructive self-esteem:
- (d) Be notified thirty days in advance if transfer is necessary for medical or nursing care, resident well—being, or welfare of other residents, unless:
- (A) An emergency condition requires immediate transfer; or
- (B) Resident does not abide by written boarding home policy affecting health and safety of self or others; or
- (C) Orderly transfer or discharge is enhanced for the resident by earlier transfer.

- (2) Rights to:
- (a) Have any notice of transfer and discharge documented in resident's record;
- (b) Associate, visit, and communicate privately with persons of his or her choice;
- (c) Send and receive uncensored correspondence through the mail;
- (d) Have reasonable access to a telephone for making and receiving personal calls;
- (e) Manage personal financial affairs unless adjudicated incompetent in a court proceeding directed to that particular issue;
- (f) Retain and use personal clothing and possessions unless to do so would infringe upon the rights of other residents;
- (g) Refuse to perform services for the facility unless these services are included in a plan of care;
- (h) Voice grievances and recommend changes in policies and services to the facility staff and to outside representatives of his or her choice free from restraint, interference, coercion, discrimination or reprisal;
- (i) Be informed of telephone numbers and address of the licensing agent or appropriate advocacy group;
- (j) Meet with and participate in activities of social, religious, and community groups at his or her discretion;
- (k) Freedom from physical, chemical, and psychological restraints unless authorized by law;
- (l) Freedom from exploitation, assault, abuse, and neglect;
- (m) Access information in own record or provide written authorization for a designated agent to access record;
- (n) Confidential treatment of information contained in resident health records with access only by authorized persons and those persons authorized by the department;
- (o) Receive timely notice of changes in policy and procedures affecting residents; and
- (p) Be informed of facility rules, including smoking rules and location of smoking and nonsmoking areas.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–316–250, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89–09–034 (Order 2786), § 248–16–215, filed 4/14/89; 83–13–068 (Order 264), § 248–16–215, filed 6/16/83; Order 147, § 248–16–215, filed 6/29/77; Order 116, § 248–16–215, filed 5/23/75; § 248–16–215, filed 10/3/67; Emergency Regulation, filed 8/4/67.]

WAC 246-316-260 Boarding home resident services. (1) Boarding homes shall:

- (a) Observe and note changes in physical, mental, and emotional functioning; and
- (b) Assist with arrangements for appropriate transfer as needed.
- (2) Boarding homes shall provide basic domiciliary care including, but not limited to:
- (a) Assisting each resident to maintain his or her highest functional ability possible and compatible with individual safety and welfare;
- (b) Providing general health supervision if required by resident including:
- (i) Encouraging resident to self-administer medically prescribed drugs and treatment;

- (ii) Encouraging resident to follow any medically prescribed modified diet, rest or activity regimen;
- (iii) Encouraging and assisting a resident with arrangements to keep appointments for health care services, e.g., physicians, dentists, home health care services, or clinics;
- (iv) Encouraging and assisting resident with arrangements to see his or her health care practitioner when the resident shows signs or describes symptoms of an illness or abnormality for which medical diagnosis and treatment may be indicated; and
- (v) Encouraging, supervising, or assisting resident with:
- (A) Personal hygienic care, dressing, grooming, and other activities;
- (B) Functional aids or equipment, such as glasses, hearing aids, canes, crutches, walker, or wheelchair;
 - (C) Clothing and other personal effects;
- (D) Personal living quarters in a manner conducive to safety and comfort.
- (c) Encouraging, guiding, or assisting residents with arrangements to participate in social, recreational, diversional, vocational, church, or other activities within the boarding home and the community in accordance with his or her interests, tolerance, and abilities.
- (3) Boarding homes shall post a calendar of daily social or recreational activities and events for residents.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-316-260, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89-09-034 (Order 2786), § 248-16-216, filed 4/14/89.]

WAC 246-316-270 First aid services. Boarding homes shall have:

- (1) Written medical emergency policies and procedures available in appropriate locations in the facility;
- (2) Adequate first aid supplies and a first aid manual kept in a specific location and readily available to all staff.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–316–270, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89–09–034 (Order 2786), § 248–16–222, filed 4/14/89; 83–13–068 (Order 264), § 248–16–222, filed 6/16/83; Order 147, § 248–16–222, filed 6/29/77.]

WAC 246-316-280 Notification regarding serious or significant change in resident's condition. Boarding homes shall:

- (1) Notify the resident's next of kin, guardian, or other individual or agency responsible for, or designated by, the resident as soon as possible regarding:
- (a) A serious or significant change in the resident's condition;
 - (b) Transfer of the resident to a hospital; and
 - (c) Death of a resident.
- (2) In case of death, notify the coroner if required under RCW 68.50.010.
 - (3) Document notification in the resident's record.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-316-280, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89-09-034 (Order 2786), § 248-16-

223, filed 4/14/89; 83–13–068 (Order 264), § 248–16–223, filed 6/16/83; Order 147, § 248–16–223, filed 6/29/77.]

WAC 246-316-290 Safety measures. Boarding homes shall:

- (1) Eliminate hazards;
- (2) Investigate and document accidents or incidents jeopardizing the health or life of a resident to:
- (a) Ascertain the circumstances of the accident or incident; and
- (b) Institute appropriate measures to prevent similar future occurrences when possible;
- (3) Provide a type of hardware on doors of storage rooms and closets preventing accidental lock—in of a resident;
- (4) Provide emergency means of rapid staff access to resident—occupied bedrooms, toilets, showers, bathrooms, and other rooms;
- (5) Keep resident care staff informed of emergency means of rapid access to resident—occupied rooms;
- (6) Prevent transmission of infection by sanitizing and appropriate handling and storage of supplies and equipment used for resident services; and
- (7) Ensure availability of flashlights or other emergency lighting in all areas.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \$ 246–316–290, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89–09–034 (Order 2786), \$ 248–16–226, filed 4/14/89; 83–13–068 (Order 264), \$ 248–16–226, filed 6/16/83; Order 147, \$ 248–16–226, filed 6/29/77.]

WAC 246-316-300 Medication services. (1) Boarding homes shall:

- (a) Provide at least one category of medication service as described in subsections (3), (5), and (6) of this section;
- (b) Determine an appropriate category of medication service for each resident involving the resident or resident-designated agent when possible;
- (c) Document the designated category or categories of each resident in the individual resident's health record;
- (d) Take actions appropriate to safety of a resident when the boarding home suspects the resident is having trouble with his or her medication management or is inappropriately categorized, including:
- (i) Assigning a resident to a new medication service category; or
- (ii) Transferring or discharging resident from the boarding home when the appropriate medication service category is unavailable in the boarding home.
- (2) Boarding homes shall follow established written policies and procedures for each medication service category provided in the boarding home including:
 - (a) Limitations of staff assistance;
- (b) Requirements for staff providing assistance with medications;
 - (c) Storing of resident medications:
- (i) In the original medication containers with pharmacist-prepared or manufacturer's label;
- (ii) Together for each resident and physically separated from other residents' medications;
 - (iii) Separate from food or toxic chemicals;

- (iv) Accessible only to designated, responsible staff or appropriate resident; and
- (v) In an environment recommended on label, if centrally stored.
- (d) Arrangements or means for assuring the resident obtains medication as prescribed;
- (e) Methods for disposition of medications following recommendations of a pharmacist or pharmacy consultant for:
 - (i) Outdated or discontinued medications;
- (ii) Medications left behind when a resident leaves or dies;
- (iii) Sending resident medication with a resident upon transfer or discharge or temporary leave.
- (f) Procedures and system for documenting and recording of:
- (i) Recommendations of a pharmacist about appropriate disposition action by the boarding home for outdated prescription medications in a centralized storage;
- (ii) Medication disposition actions taken by boarding home staff;
- (iii) Identity by signature of two persons observing any staff medication disposition, except when a resident is totally accountable and responsible for his or her own medication management;
- (iv) Current prescriber's order for any medications managed and controlled by the boarding home; and
- (v) When a resident takes or does not take medication, unless the resident is totally accountable and responsible for his or her own medication management.
- (g) Maintenance and retention of completed medication records for five years from date of discharge.
- (3) Boarding homes shall designate a resident as eligible for supervised medication service Category A when:
- (a) A resident is capable of self-administration of medication without assistance or guidance from another person; and
- (b) A resident is capable of storing his or her own medications in a manner prohibiting access and availability to other residents; or
- (c) A resident has a physical condition or disability prohibiting or interfering with his or her ability to take prescribed medication properly, but:
- (i) The resident understands the appropriate use of his or her medication; and
- (ii) The resident is capable of communicating and directing others to give physical assistance with his or her medication as prescribed.
- (4) Boarding homes shall only assist a resident in service category A to self-administer medication according to:
- (a) A health care practitioner's written order or the pharmacist or manufacturer's prepared label;
 - (b) Limits specified in subsection (3) of this section;
- (c) Procedures for designated staff responsible for physically assisting residents with medications limiting staff assistance to:
 - (i) Reading the label;
 - (ii) Opening the container; and

- (iii) Application or instillation of oral, skin, nose, eye, and ear preparations.
- (5) Boarding homes shall designate a resident as needing supervised medication service Category B when:
- (a) A resident requires reminding, guiding, or coaching to take medication properly, but requires no physical assistance except opening of a container; and
- (b) Access and availability of medications only to authorized persons cannot be assured unless controlled in locked storage by the boarding home.
- (6) Boarding homes shall only assist a resident in service Category B to self-administer medication according to:
- (a) A health care practitioner's written order or the pharmacist's or manufacturer's prepared label;
- (b) Limits specified in subsection (5) of this section; and
- (c) Procedures for designated staff responsible for reminding, guiding, or coaching residents with medication, limiting staff assistance to:
 - (i) Reading the label or more current prescriber order;
 - (ii) Opening the container; and
- (iii) Communicating the prescriber's order to the resident in such a manner that the resident self-administers his or her medication properly.
- (7) Boarding homes shall designate a resident as needing supervised medication service Category C when:
- (a) A resident cannot take or handle his or her own medication appropriately; and
- (b) The resident's physician provided a written order specifying the resident requires certain specified medications administered by a person licensed to administer medications.
- (8) Boarding homes accepting or retaining any resident requiring supervised medication service Category C shall:
- (a) Have a physician or registered nurse available for supervised medication service Category C who:
 - (i) Plans, directs, and supervises the service; and
- (ii) Reviews each resident's condition and medication regimen as needed and at least quarterly, documenting reviews in the resident health record.
- (b) Provide registered nurses, licensed practical nurses, or other licensed person under Washington state laws to administer medications; and
- (c) Maintain and include in the resident health record a current, written prescriber's order specifying medications requiring nurse administration.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–316–300, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89–09–034 (Order 2786), § 248–16–229, filed 4/14/89.]

- WAC 246-316-310 Resident register. Boarding homes shall maintain a permanent, current book or a register of all individuals who become residents including:
 - (1) Date of admission;
 - (2) Full name; and
 - (3) Date of discharge.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–316–310, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89–09–034 (Order 2786), § 248–16–230, filed 4/14/89; 83–13–068 (Order 264), § 248–16–230, filed 6/16/83; Order 147, § 248–16–230, filed 6/29/77; Order 116, § 248–16–230, filed 5/23/75; § 248–16–230, filed 10/3/67; Emergency Regulation, filed 8/4/67; Regulation .16.230, effective 3/11/60; Subsection 1, filed 5/31/61.]

WAC 246-316-320 Resident health record. (1) Boarding homes shall maintain a health record in ink, typewritten or equivalent, for each resident including:

- (a) Full name, date of birth, and former address of resident;
 - (b) Date admitted as resident and date discharged;
- (c) Name, address, and telephone number of next-of-kin or other responsible person;
- (d) Name, address, and telephone number of resident's personal physician or health care practitioner;
 - (e) Signed staff entries about:
- (i) Dates and descriptions of resident illnesses, accidents, or incidents;
- (ii) Changes in resident functional abilities or physical and mental coordination; and
- (iii) Actions of staff related to subdivision (e)(i) and (ii) of this subsection.
- (f) Orders signed by a resident's physician or health care practitioner for any modified diet, concentrate or supplement provided by the boarding home; and
- (g) Medication orders and records as specified in WAC 248-16-229.
 - (2) Boarding homes shall:
- (a) Maintain a systematic, secure method of identifying and filing resident health records for ease in locating; and
- (b) Retain each resident health record at least five years following resident discharge.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-316-320, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89-09-034 (Order 2786), § 248-16-235, filed 4/14/89; 83-13-068 (Order 264), § 248-16-235, filed 6/16/83.]

- WAC 246-316-330 Adult day care. (1) Boarding homes choosing to provide adult day care services and to accept or admit adults for domiciliary care in a boarding home for less than a contiguous twenty-four hours shall:
- (a) Accept and retain for day care only those adults meeting resident criteria described in WAC 248-16-213:
- (b) Provide day room and dining room facilities complying with WAC 248-16-141 and 248-16-150;
- (c) Provide toilets and lavatories complying with WAC 248-16-131;
 - (d) Provide comfortable, suitable chairs and furniture;
- (e) Provide sufficient furniture for comfort of residents and day care adults including, but not limited to:
- (i) Napping furniture for day care adults such as lounge chairs, recliners, couches; and
- (ii) Ability to space napping furniture at least three feet apart if needed or requested.

- (f) Provide staff to supervise and assist day care adults in activities of daily living and medication management as described in WAC 248-16-216 and 248-16-229:
- (g) Provide a meal meeting at least one-third of the recommended dietary allowance during every five-hour period of stay (the exception to the recommended dietary allowance is during normal sleeping hours when fasting periods greater than fourteen hours are prohibited);
- (h) Ensure and provide rights, services, notification, and safety as described in WAC 248-16-215, 248-16-216, 248-16-223, 248-16-226;
- (i) Maintain a separate register of all day care adults using format described in WAC 248-16-230;
- (j) Maintain a health record for each day care adult as described for residents in WAC 248-16-235.
- (2) Boarding homes choosing to accept adults for day care shall:
- (a) Notify the department of the plan to accept or admit adults to day care;
- (b) Provide information as required for the department to establish compliance with this section; and
- (c) Obtain written department approval for maximum day care adult capacity prior to accepting or admitting adults for day care.
- (3) When notified of boarding home licensee's plan to accept day care adults, the department shall:
- (a) Determine whether or not a boarding home complies with this section;
- (b) Issue written approval for occupancy based on compliance with WAC 248-16-300; and
- (c) Indicate approved capacity for day care adults on the boarding home license.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-316-330, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89-09-034 (Order 2786), § 248-16-300, filed 4/14/89.]

WAC 246-316-340 Exemptions. (1) The secretary of the department or the designated licensing program administrator may approve an exemption to a specific rule under certain terms or conditions for a specified boarding home premise:

- (a) Following an investigation regarding safety; and
- (b) Provided an evaluation of the results reveals safety and health of residents will remain unjeopardized in that facility.
- (2) Boarding homes shall maintain a copy of each department-approved exemption.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–316–340, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 18.20.090. 89–09–034 (Order 2786), § 248–16–900, filed 4/14/89. Statutory Authority: 1985 c 213. 86–08–002 (Order 2348), § 248–16–900, filed 3/20/86; Order 147, § 248–16–900, filed 6/29/77.]

WAC 246-316-990 Fees. Boarding homes licensed under chapter 18.20 RCW shall:

Submit an annual fee of fourteen dollars multiplied by the licensed resident capacity of the boarding home. The "licensed resident capacity" is the resident occupancy level determined by the boarding home and approved by the department, consistent with physical plant and movable equipment requirements for resident sleeping rooms.

The occupancy level shall be maintained at or below the licensed resident capacity of the boarding home.

[Statutory Authority: RCW 43.70.040. 91-02-050 (Order 122), § 246-316-990, filed 12/27/90, effective 1/31/91.]

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WAC 246-318-010 Definitions. For the purposes of chapter 248-18 WAC and chapter 70.41 RCW, the following words and phrases shall have the following meanings unless the context clearly indicates otherwise. All adjectives and adverbs such as adequate, approved, suitable, properly, or sufficient used in these regulations to qualify a requirement shall be determined by the department.

246-318-99910 Appendix J. Guidelines for laboratory quality assurance program in hospitals.

(1) "Abuse" means the injury or sexual abuse of a patient under circumstances indicating the health, welfare, and safety of the patient is harmed. Person "legally responsible" shall include a parent, guardian, or an individual to whom parental or guardian responsibility is delegated (e.g., teachers, providers of residential care and treatment, and providers of day care):

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- (a) "Physical abuse" means damaging or potentially damaging nonaccidental acts or incidents which may result in bodily injury or death.
- (b) "Emotional abuse" means verbal behavior, harassment, or other actions which may result in emotional or behavioral problems, physical manifestations, disordered or delayed development.
- (2) "Accredited" means approved by the joint commission on accreditation of hospitals or the bureau of hospitals of the American Osteopathic Association.
- (3) "Adolescent" means an individual during that period of life beginning with the appearance of secondary sex characteristics and ending with the cessation of somatic growth.
- (4) "Agent," when used in a reference to a medical order or a procedure for a treatment, means any power, principle, or substance, whether physical, chemical, or biological, capable of producing an effect upon the human body.
 - (5) "Alterations":
- (a) "Alterations" means changes requiring construction in existing hospitals.
- (b) "Minor alterations" means any physical or functional modification within existing hospitals not changing the approved use of the room or area. (Minor alterations performed under this definition do not require prior review of the department as specified in WAC 248-18-510 (3)(a); however, this does not constitute a release from other applicable requirements.)
- (6) "Area" means a portion of a room containing the equipment essential to carrying out a particular function and separated from other facilities of the room by a physical barrier or adequate space, except when used in reference to a major section of the hospital.
- (7) "Authenticate" means to authorize or validate an entry in a record by:
- (a) A signature including first initial, last name, and discipline; or
- (b) A unique identifier allowing identification of the responsible individual.
- (8) "Bathing facility" means a bathtub or shower and does not include sitz baths or other fixtures designated primarily for therapy.
- (9) "Birthing room" or "labor, delivery, recovery (LDR) room" or "labor-delivery-recovery-postpartum (LDRP) room" means a room designed and equipped to provide care of a woman, fetus, and newborn and to accommodate her support persons during the complete process of vaginal childbirth.
- (10) "Children" means young persons of either sex between infancy and adolescence.
- (11) "Clean" means space or spaces and/or equipment for storage and handling of supplies and/or equipment which are in a sanitary or sterile condition, when the word is used in reference to a room, area, or facility.
- (12) "Critical care" means a special physical and functional nursing unit for the segregation, concentration, and close or continuous observation and care of patients critically, acutely, or seriously ill and in need of intensive, highly skilled services.

- (13) "Department" means the Washington state department of health.
- (14) "Dentist" means an individual licensed under chapter 18.32 RCW.
- (15) "Diagnostic radiologic technician" means an individual:
- (a) Certified or eligible for certification as a diagnostic radiologic technologist under chapter 18.84 RCW; or
- (b) Trained by a radiologist and approved by a radiologist member of medical staff to perform specified diagnostic radiologic procedures.
- (16) "Dialysis facility" means a separate physical and functional nursing unit of the hospital serving patients receiving renal dialysis.
- (17) "Dialysis station" means an area designed, equipped, and staffed to provide dialysis services for one patient.
- (18) "Dietitian" means an individual meeting the eligibility requirements for active membership in the American Dietetic Association described in *Directory of Dietetic Programs Accredited and Approved*, American Dietetic Association, edition 100, 1980.
- (19) "Double-checking" means verification of patient identity, agent to be administered, route, quantity, rate, time, and interval of administration by two persons legally qualified to administer prior to administration of the agent.
- (20) "Drug administration" means an act in which a single dose of a prescribed drug or biological is given to a patient by an authorized person in accordance with all laws and regulations governing such acts. The complete act of administration entails:
- (a) Removing an individual dose from a previously dispensed, properly labeled container (including a unit dose container);
- (b) Reviewing the label on the container with a verified transcription, a direct copy or the original medical practitioner's orders;
- (c) Giving the individual dose to the proper patient; and
 - (d) Properly recording the time and dose given.
- (21) "Drug dispensing" means an act entailing the interpretation of an order for a drug or biological and, pursuant to that order, proper selection, measuring, labeling, packaging, and issuance of the drug for a patient or for a service unit of the facility.
- (22) "Easily cleanable" means of material or finish and so fabricated to allow complete removal of residue by normal cleaning methods.
- (23) "Electrical receptacle outlet" means an outlet where one or more electrical receptacles are installed.
- (24) "Facilities" means a room or area and equipment serving a specific function.
- (25) "Faucet controls" means wrist, knee, or foot control of the water supply:
- (a) "Wrist control" means water supply controls not exceeding four and one-half inches overall horizontal length designed and installed to be operated by the wrists:

- (b) "Knee control" means the water supply is controlled through a mixing valve designed and installed to be operated by the knee;
- (c) "Foot control" means the water supply control is through a mixing valve designed and installed to be operated by the foot.
- (26) "Governing body" means the person or persons responsible for establishing the purposes and policies of the hospital.
- (27) "Grade" means the level of the ground adjacent to the building measured at required windows. The ground must be level or slope downward for a distance of at least ten feet from the wall of the building. From there the ground may slope upward not greater than an average of one foot vertical to two feet horizontal within a distance of eighteen feet from the building.
- (28) "Handwashing facility" means a lavatory or a sink properly designed and equipped to serve for handwashing purposes.
- (29) "He, him, his, or himself" means a person of either sex, male, or female, and does not mean preference for nor exclude reference to either sex.
- (30) "High-risk infant" means an infant, regardless of gestational age or birth weight, whose extrauterine existence is compromised by a number of factors, prenatal, natal, or postnatal needing special medical or nursing care.
- (31) "Hospital" means any institution, place, building, or agency providing accommodations, facilities and services over a continuous period of twenty—four hours or more, for observation, diagnosis, or care of two or more individuals not related to the operator who are suffering from illness, injury, deformity, or abnormality, or from any other condition for which obstetrical, medical, or surgical services would be appropriate for care or diagnosis. "Hospital" as used in this chapter does not include:
- (a) Hotels, or similar places furnishing only food and lodging, or simply domiciliary care;
- (b) Clinics, or physicians' offices where patients are not regularly kept as bed patients for twenty-four hours or more;
- (c) Nursing homes, as defined and which come within the scope of chapter 18.51 RCW;
- (d) Maternity homes, which come within the scope of chapter 18.46 RCW;
- (e) Psychiatric or alcoholism hospitals, which come within the scope of chapter 71.12 RCW; nor
- (f) Any other hospital or institution specifically intended for use in the diagnosis and care of those suffering from mental illness, mental retardation, convulsive disorders, or other abnormal mental conditions.
- (g) Furthermore, nothing in this chapter shall be construed as authorizing the supervision, regulation, or control of the remedial care or treatment of residents or patients in any hospital conducted for those who rely primarily upon treatment by prayer or spiritual means in accordance with the creed or tenets of any well-recognized church or religious denominations.
- (32) "Infant" means a baby or very young child up to one year of age.

- (33) "Infant station" means a space for a bassinet, incubator, or equivalent, including support equipment used for the care of an individual infant.
- (34) "Intermediate care nursery" means an area designed, organized, staffed, and equipped to provide constant care and treatment for mild to moderately ill infants not requiring neonatal intensive care, but requiring or may require physical support and treatment beyond support required for a normal neonate and may include the following:
 - (a) Electronic cardiorespiratory monitoring;
 - (b) Gavage feedings;
- (c) Parenteral therapy for administration of drugs; and
- (d) Respiratory therapy with intermittent mechanical ventilation not to exceed a continuous period of twenty-four hours for stabilization when trained staff are available.
- (35) "Investigational drug" means any article not approved for use in the United States, but for which an investigational drug application (IND) is approved by the Food and Drug Administration.
- (36) "Island tub" means a bathtub placed in a room to permit free movement of a stretcher, patient lift, or wheelchair to at least one side of the tub, and movement of people on both sides and at the end of the tub.
- (37) "Lavatory" means a plumbing fixture of adequate design and size for washing hands.
- (38) "Legend drugs" means any drugs required by state law or regulation of the state board of pharmacy to be dispensed on prescription only or are restricted to use by practitioners only.
- (39) "Licensed practical nurse," abbreviated L.P.N., means an individual licensed under provisions of chapter 18.78 RCW.
- (40) "May" means permissive or discretionary on the part of the board or the department.
- (41) "Medical staff" means physicians and may include other practitioners appointed by the governing body to practice within the parameters of governing body and medical staff bylaws.
- (42) "Movable equipment" means equipment not built—in, fixed, or attached to the building.
- (43) "Neglect" means mistreatment or maltreatment; an act or omission evincing; a serious disregard of consequences of a magnitude constituting a clear and present danger to an individual patient's health, welfare, and safety.
- (a) "Physical neglect" means physical or material deprivation (e.g., lack of medical care, lack of supervision necessary for patient level of development, inadequate food, clothing, or cleanliness).
- (b) "Emotional neglect" means acts such as rejection, lack of stimulation, or other acts of commission or omission which may result in emotional or behavioral problems, physical manifestations, and disordered development.
- (44) "Nuclear medicine technologist" means an individual certified or eligible for certification as a nuclear medicine technologist under chapter 18.84 RCW.

- (45) "Neonate" or "newborn" means a newly born infant through the twenty-seventh day of life or under twenty-eight days of age.
- (46) "Neonatal intensive care nursery" means an area designed, organized, equipped, and staffed to provide constant nursing and medical care and treatment for high-risk infants who may require:
- (a) Continuous ventilatory support, twenty-four hours per day;
 - (b) Intravenous fluids or parenteral nutrition;
- (c) Preoperative and postoperative monitoring when anesthetic other than local is administered; or
- (d) Cardiopulmonary or other life support on a continuing basis.
- (47) "Neonatologist" means a pediatrician who is board certified in neonatal-perinatal medicine or board eligible in neonatal-perinatal medicine, provided the period of eligibility does not exceed three years, as defined and described in *Directory of Residency Training Programs by the Accreditation Council for Graduate Medical Education*, American Medical Association, 1981–1982 or the *American Osteopathic Association Year-book and Directory*, 1981–1982.
- (48) "Newborn care" means provision of nursing and medical services described by the hospital and appropriate for well and convalescing infants including supportive care, ongoing physical assessment, and resuscitation.
 - (49) "New construction" means any of the following:
 - (a) New buildings to be used as hospitals;
- (b) Additions to existing buildings to be used as hospitals;
- (c) Conversion of existing buildings or portions thereof for use as hospitals;
 - (d) Alterations.
- (50) "Nursing home unit" or "long-term care unit" means a group of beds for the accommodation of patients who, because of chronic illness or physical infirmities, require skilled nursing care and related medical services but are not acutely ill and not in need of the highly technical or specialized services ordinarily a part of hospital care.
- (51) "Nursing unit, general" means a separate physical and functional unit of the hospital including a group of patient rooms, ancillary and administrative, and service facilities necessary to provide nursing service to the occupants of these patient rooms. Facilities serving other areas of the hospital and creating traffic unnecessary to the functions of the nursing unit are excluded.
- (52) "Observation room" means a room for close nursing observation and care of one or more outpatients for a period of less than twenty-four consecutive hours.
- (53) "Obstetrical area" means the portions or units of the hospital designated or designed for care and treatment of women during the antepartum, intrapartum, and postpartum periods, and/or areas designed as nurseries for care of newborns.
- (54) "Occupational therapist" means an individual licensed under the provisions of chapter 18.59 RCW.
- (55) "Patient" means an individual receiving (or has received) preventive, diagnostic, therapeutic, rehabilitative, maintenance, or palliative health services at the

- hospital. "Outpatient" means a patient receiving services that generally do not require admission to a hospital bed for twenty-four hours or more.
- (56) "Patient care areas" means all nursing service areas of the hospital where direct patient care is rendered and all other areas of the hospital where diagnostic or treatment procedures are performed directly upon a patient.
 - (57) "Pediatrician" means a physician:
- (a) Having successfully completed a residency program approved by the American Board of Pediatrics as described in the *Directory of Residence Training Programs Accredited by the Accreditation Council for Graduate Medical Education*, American Medical Association, 1981–1982; or
- (b) Approved by the American Osteopathic Board of Pediatrics as described in the American Osteopathic Association Yearbook and Directory, 1981-1982; and
- (c) Board certified or board eligible for period not to exceed three years.
- (58) "Pediatric service" means any diagnostic, treatment, or care service provided for infants, children, or adolescents.
- (59) "Person" means any individual, firm, partnership, corporation, company, association, or joint stock association, and the legal successor thereof.
- (60) "Pharmacist" means an individual licensed by the state board of pharmacy to engage in the practice of pharmacy under the provisions of chapter 18.64 RCW as now or hereafter amended.
- (61) "Pharmacy" means the central area in a hospital where drugs are stored and are issued to hospital departments or where prescriptions are filled.
- (62) "Physical barrier" means a partition or similar space divider designed to prevent splash or spray between room areas.
- (63) "Physical therapist" means an individual licensed under provisions of chapter 18.74 RCW.
- (64) "Physician" means an individual licensed under provisions of chapter 18.71 RCW, Physicians, or chapter 18.57 RCW, Osteopathy—Osteopathic medicine and surgery.
- (65) "Physician's assistant" means an individual who is not a physician but practices medicine under provisions, rules, and regulations of chapter 18.71A RCW, or provisions, rules, and regulations under chapter 18.57A RCW.
- (66) "Physician member of medical staff qualified in nuclear medicine" means a physician with staff privileges who is:
- (a) Certified or eligible for certification by the American Board of Radiology (ABR) or the American Board of Nuclear Medicine (ABNM) in radiologic physics including diagnostic, therapeutic, and medical nuclear physics; and
- (b) Included in the 1987-1989 list of board-certified physicians maintained by ACR Professional Bureau, 1899 Preston White Drive, Reston, VA 22091.
- (67) "Prescription" means an order for drugs for a specific patient given by a licensed physician, dentist, or other individual legally authorized to write prescriptions,

transmitted to a pharmacist for dispensing to the specific patient.

- (68) "Protocols" and "standing order" mean written descriptions of actions and interventions for implementation by designated hospital personnel under defined circumstances and authenticated by a legally authorized person under hospital policy and procedure.
- (69) "Psychiatric unit" means a separate portion of the hospital specifically reserved for the care of psychiatric patients (a part of which may be unlocked and a part locked), as distinguished from "seclusion rooms" or "security rooms" as defined in this section.
- (70) "Psychiatrist" means a physician having successfully completed a three-year residency program in psychiatry and is eligible for certification by the American Board of Psychiatry and Neurology as described in the Directory of Residency Training Programs Accredited by the Accreditation Council for Graduate Medical Education, American Medical Association, 1981–1982, or eligible for certification by the American Osteopathic Board of Neurology and Psychiatry as described in the American Osteopathic Association Yearbook and Directory, 1981–1982.
- (71) "Psychologist" means an individual licensed as a psychologist in the state of Washington under provisions of chapter 18.83 RCW.
- (72) "Radiation oncologist" means a physician who successfully completed an approved residency program in therapeutic radiology and is either board certified or eligible for board certification in radiation oncology by:
- (a) The American Board of Radiology described under Directory of Residency Programs Accredited by the Accreditation Council for Graduate Medical Education, American Medical Association, 1981–82, with:
- (i) Certification in use of both external and brachytherapy techniques; and
- (ii) Continuing education requirements of the board met; or
- (b) The American Osteopathic Board of Radiology described in the American Osteopathic Association Yearbook and Directory, 1981-82 with:
- (i) Certification in use of both external and brachytherapy techniques; and
- (ii) Continuing education requirements of the board met.
- (73) "Radiologist" means a physician who is board certified or eligible for certification in radiology and meeting continuing education requirements of:
- (a) The American Board of Radiology described under Directory of Residency Programs Accredited by the Accreditation Council for Graduate Medical Education, American Medical Association, 1981–82; or
- (b) The American Osteopathic Board of Radiology described under American Osteopathic Association Yearbook and Directory, 1981-82.
- (74) "Recreational therapist" means an individual with a bachelors degree including a major or option in therapeutic recreation or recreation for the ill and handicapped.
- (75) "Recovery unit" means a special physical and functional unit for the segregation, concentration, and

- close or continuous nursing observation and care of patients for a period of less than twenty-four hours immediately following anesthesia, obstetrical delivery, surgery, or other diagnostic or treatment procedures which may produce shock, respiratory obstruction or depression, or other serious states.
- (76) "Referred outpatient diagnostic service" means a service provided to an individual receiving medical diagnosis, treatment, and other health care services from one or more sources outside the hospital limited to diagnostic tests and examinations:
- (a) Not involving administration of a parenteral injection, the use of a local or general anesthesia or the performance of a surgical procedure; and
- (b) Ordered by a health care practitioner, legally permitted to order such tests and examinations, to whom the hospital reports the findings and results of the tests and examinations.
- (77) "Registered nurse" means an individual licensed under the provisions of chapter 18.88 RCW and practicing in accordance with the rules and regulations promulgated thereunder.
- (78) "Restraint" means any apparatus used for the purpose of preventing or limiting free body movement. This shall not be interpreted to include a safety device as defined herein.
- (79) "Room" means a space set apart by floor-to-ceiling partitions on all sides with proper access to a corridor and with all openings provided with doors or windows.
- (80) "Rooming-in" means an arrangement for mother and infant to room together with provision for family interaction within the hospital setting.
- (81) "Safety device" means a device used to safeguard a patient who, because of developmental level or condition, is particularly subject to accidental self-injury.
- (82) "Seclusion room" means a small, secure room specifically designed and organized to provide for temporary placement, care, and observation of one patient and further providing an environment with minimal sensory stimuli, maximum security and protection, and visualization of the patient by authorized personnel and staff. Doors of seclusion rooms shall be provided with staff—controlled locks. There shall be security relites in the door or equivalent means affording visibility of the occupant at all times. Inside or outside rooms may be acceptable.
- (83) "Security room" means a patient sleeping room designed, furnished, and equipped to provide maximum safety and security, including window protection or security windows and a lockable door with provision for observation of room occupant.
- (84) "Self-administration of drugs" means a patient administering or taking his or her own drugs from properly labeled containers: *Provided*, That the facility maintains the responsibility for seeing the drugs are used correctly and the patient is responding appropriately.
- (85) "Sensitive area" means a room used for surgery, obstetrical delivery, nursery, post-anesthesia recovery, special procedures where invasive techniques are used, or

critical care including, but not limited to, intensive and cardiac care

- (86) "Shall" means compliance is mandatory.
- (87) "Should" means a suggestion or recommendation, but not a requirement.
 - (88) "Sinks":
- (a) "Clinic service sink (siphon jet)" means a plumbing fixture of adequate size and proper design for waste disposal with siphon jet or similar action sufficient to flush solid matter of at least two and one—eighth inch diameter.
- (b) "Scrub sink" means a plumbing fixture of adequate size and proper design for thorough washing of hands and arms, equipped with knee, foot, electronic, or equivalent control, and gooseneck spout.
- (c) "Service sink" means a plumbing fixture of adequate size and proper design for filling and emptying mop buckets.
- (89) "Social worker" means an individual holding a masters degree in social work from a graduate school of social work approved by the council on social work education.
- (90) "Soiled" (when used in reference to a room, area, or facility) means space and equipment for collection or cleaning of used or contaminated supplies and equipment or collection or disposal of wastes.
- (91) "Stretcher" means a four-wheeled cart designed to serve as a litter for the transport of an ill or injured individual in a horizontal or recumbent position.
- (92) "Surgical procedure" means any manual or operative procedure performed upon the body of a living human being for the purpose of preserving health, diagnosing or curing disease, repairing injury, correcting deformity or defect, prolonging life or relieving suffering, and involving any of the following:
- (a) Incision, excision, or curettage of tissue or an organ;
- (b) Suture or other repair of tissue or an organ including a closed as well as an open reduction of a fracture;
- (c) Extraction of tissue including the premature extraction of the products of conception from the uterus; or
- (d) An endoscopic examination with use of a local or general anesthesia.
- (93) "Therapeutic radiologic technologist" means an individual certified or eligible for certification as a therapeutic radiologic technologist under chapter 18.84 RCW
- (94) "Through traffic" means traffic for which the origin and destination are outside the room or area serving as a passageway.
- (95) "Toilet" means a room containing at least one water closet.
- (96) "Tuberculous patient" means an individual receiving diagnostic or treatment services because of suspected or known tuberculosis.
- (97) "Water closet" means a plumbing fixture for defecation fitted with a seat and device for flushing the bowl of the fixture with water.

- (98) "Window" means a glazed opening in an exterior wall.
- (a) "Maximum security window" means a window that can only be opened by keys or tools under the control of personnel. The operation shall be restricted to prohibit escape or suicide. Where glass fragments may create a hazard, safety glazing and other appropriate security features shall be incorporated. Approved transparent materials other than glass may be used.
- (b) "Relite" means a glazed opening in an interior partition between a corridor and a room or between two rooms to permit viewing.
- (c) "Security window" means a window designed to inhibit exit, entry, and injury to a patient, incorporating approved, safe transparent material.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 90-24-044 (Order 115), § 248-18-001, filed 11/30/90, effective 12/31/90; 89-22-106 (Order 010), § 248-18-001, filed 11/1/89, effective 12/2/89; 88-18-021 (Order 2680), § 248-18-001, filed 8/30/88. Statutory Authority: 1985 c 213. 86-08-002 (Order 2348), § 248-18-001, filed 3/20/86. Statutory Authority: RCW 70.41.030 and 43.20.050. 84-17-077 (Order 275), § 248-18-001, filed 8/16/84; 83-19-058 (Order 269), § 248-18-001, filed 9/20/83; 83-01-003 (Order 245), § 248-18-001, filed 12/2/82. Statutory Authority: RCW 70.41.030. 81-05-029 (Order 209), § 248-18-001, filed 2/18/81; Order 135, § 248-18-001, filed 12/6/76; Order 119, § 248-18-001, filed 5/23/75; Order 106, § 248-18-001, filed 1/13/75; Order 91, § 248-18-001, filed 10/3/73; Order 83, § 248-18-001, filed 4/9/73; Order 50, § 248-18-001, filed 12/17/70; Regulation 18.001, effective 3/11/60.]

- WAC 246-318-013 License expiration dates—Notice of decision—Adjudicative proceeding. (1) The department shall issue hospital licenses initially and reissue hospital licenses as often thereafter as necessary to stagger license expiration dates throughout the calendar year so as to cause approximately one—twelfth of the total number of hospital licenses to expire on the last day of each month, but no license issued pursuant to this chapter shall exceed thirty—six months in duration. If there is failure to comply with the provisions of chapter 70.41 RCW or this chapter, the department may, in its discretion, issue a provisional license to permit the operation of the hospital for a period of time to be determined by the department.
- (2) The department may deny, suspend, modify, or revoke a license for cause.
- (3)(a) The department's notice of a denial, suspension, modification, or revocation of a license shall be consistent with RCW 43.20A.XXX and section 95, chapter 175, Laws of 1989. An applicant or license holder has the right to an adjudicative proceeding to contest a license decision.
- (b) A license applicant or holder contesting a department license decision shall within twenty-eight days of receipt of the decision:
- (i) File a written application for an adjudicative proceeding by a method showing proof of receipt with the Office of Appeals, P.O. Box 2465, Olympia, WA 98504; and
 - (ii) Include in or with the application:
- (A) A specific statement of the issue or issues and law involved;

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- (B) The grounds for contesting the department decision; and
 - (C) A copy of the contested department decision.
- (c) The proceeding is governed by the Administrative Procedure Act (chapter 34.05 RCW), this chapter, and chapter 248–08 WAC. If a provision in this chapter conflicts with chapter 248–08 WAC, the provision in this chapter governs.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–013, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 34.05 RCW, RCW 34.05.220 (1)(a) and 70.41.030. 90–06–019 (Order 039), § 248–18–015, filed 2/28/90, effective 3/1/90. Statutory Authority: RCW 70.41.030 and 43.20.050. 82–24–002 (Order 249), § 248–18–015, filed 11/18/82; Order 119, § 248–18–015, filed 5/23/75; Order 69, § 248–18–015, filed 1/13/72.]

WAC 246-318-015 Exemptions and interpretations. (1) If a hospital that is required to be licensed under this act does not normally provide a particular service or department, the section or sections of these regulations relating to such service or department will not be applicable.

(2) The department may, in its discretion, exempt certain hospitals from complying with parts of these regulations when it has been found after thorough investigation and consideration that such exemption may be made in an individual case without placing the safety or health of the patients in the hospitals involved in jeopardy.

- (3) The secretary of the department or his or her designee may, upon written application of a hospital, allow the substitution of procedures, materials, or equipment for those specified in these regulations when such procedures, materials, or equipment have been demonstrated to his or her satisfaction to be at least equivalent to those prescribed. The secretary or his or her designee shall send a written response to a hospital which has applied for approval of a substitution. The response shall approve or disapprove the substitution and shall be issued within thirty working days after the department has received all the information necessary to the review of the application.
- (4) A hospital may, upon submission of a written request to the secretary of the department or his or her designee, obtain an interpretation of a rule or regulation contained in chapter 248–18 WAC. The secretary or his or her designee shall, in response to such a request, send a written interpretation of the rule or regulation within thirty working days after the department has received complete information relevant to the requested interpretation.
- (5) A copy of each exemption or substitution granted or interpretation issued pursuant to the provisions of this section shall be reduced to writing and filed with the department and the hospital.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–015, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.41 RCW. 90–12–014 (Order 061), § 248–18–010, filed 5/30/90, effective 6/30/90. Statutory Authority: 1985 c 213. 86–08–002 (Order 2348), § 248–18–010, filed 3/20/86. Statutory Authority: RCW 70.41.30 [70.41.030]. 81–05–029 (Order 209), § 248–18–010, filed 2/8/77; Order 119, § 248–18–010, filed 5/23/75; Order 50, § 248–18–010,

filed 12/17/70; Order 22, § 248-18-010, filed 6/27/69; Order 10, § 248-18-010, filed 1/2/69; Regulation 18.010, effective 3/11/60; Subsection (3), filed 2/17/61.]

WAC 246-318-017 Single license to cover two or more buildings—When permissible. When an applicant and the hospital facility for which such application is submitted meet the licensure requirements of chapter 70.41 RCW and chapter 248-18 WAC, the department may issue a single hospital license to include two or more buildings, provided:

- (1) The licensee shall operate the multiple buildings as a single integrated system.
- (a) All buildings or portions of buildings under a single license shall be governed by a single governing body and under administrative control of a single administrator, and
- (b) All hospital facilities operating under a single license shall have a single medical staff.
- (2) Buildings connected by a heated, enclosed passageway are considered a single building and the passageway shall be constructed and maintained to permit the safe transfer of patients, equipment, and supplies.
- (3) Safe, appropriate, and adequate transport of patients between buildings shall be provided.
- (4) Hospital buildings included under one license shall not be located more than ten surface miles apart.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–017, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 85–23–020 (Order 2305), § 248–18–017, filed 11/13/85; Order 119, § 248–18–017, filed 5/23/75.]

WAC 246-318-018 Hospital license to cover attached nursing home building—When permissible. A building meeting the requirements of chapter 248-14 WAC and which has been approved by the department of social and health services as a nursing home may be licensed as a part of a hospital by means of a hospital license rider provided:

- (1) The hospital makes application for license of the nursing home facility as a part of the hospital;
- (2) The hospital and nursing home facility organization, administration and operation are integrated;
- (3) The nursing home facility is connected to the hospital by an enclosed, heated passageway which has been approved by the department for the transport of patients, equipment and supplies; and
- (4) The hospital establishes and maintains a mechanism whereby placement and retention of patients in the nursing home facility are reviewed by a professional group representative of the hospital's administrative, medical and nursing staffs to assure that use of the nursing home facility is limited to patients who require nonacute, convalescent or chronic care only.

And further provided that where requirements of chapter 248-14 WAC affecting only the maintenance and operation of the nursing home facility are in conflict with chapter 248-18 WAC, then such conflicts may be resolved by each hospital individually: *Provided*, That maintenance and operation of the facility meet either chapter 248-14 WAC or chapter 248-18 WAC.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-018, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.41 RCW. 90-12-014 (Order 061), § 248-18-018, filed 5/30/90, effective 6/30/90; Order 119, § 248-18-018, filed 5/23/75.]

- WAC 246-318-020 Approval of plans. (1) Plans and specifications for new construction other than minor alterations, shall be prepared by or under the direction of an architect duly registered in the state of Washington. It is strongly recommended that a narrative description of any proposed construction or alterations be submitted to the department prior to the preparation of any preliminary drawings.
- (2) All new construction, other than minor alterations, shall be done in accordance with at least the specific minimum requirements of the department covering new construction in hospitals, including submission of preliminary plans and the submission and approval of final working drawings and specifications.
- (3) Compliance with these standards and regulations does not relieve the hospital of the need to comply with applicable state and local building and zoning codes.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-020, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.41 RCW. 90-12-014 (Order 061), § 248-18-020, filed 5/30/90, effective 6/30/90; Order 119, § 248-18-020, filed 5/23/75; Regulation 18.020, effective 3/11/60.]

- WAC 246-318-025 Required approval for occupancy after completion of new construction. (1) Prior to occupancy and use of a building or any room or other portion of a building constituting the whole or part of a new construction project, a hospital shall have obtained written authorization for such occupancy from the department.
- (2) The hospital shall notify the department when either of the following has been substantially completed: An entire new construction project, or any room or other portion of a new construction project the hospital plans to occupy before the entire new construction project is finished.
- (3) The department shall authorize occupancy if the new construction has been completed in accordance with chapter 248–18 WAC and the department has received written approval of such occupancy from the state fire marshal.
- (4) The department may authorize occupancy of a building or any room or other portion of a building when the new construction is deficient in relation to chapter 248–18 WAC: *Provided*, That the department has determined, after thorough investigation and consideration, the deficiencies will not impair services to patients or otherwise jeopardize the safety or health of patients, the hospital has provided written assurance of completion or correction of deficient items within a period of time acceptable to the department, and the department has received written approval of such occupancy from the state fire marshal.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-025, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030 and 43.20.050. 82-13-084 (Order

230), \S 248–18–025, filed 6/22/82; Order 123, \S 248–18–025, filed 3/18/76.]

- WAC 246-318-030 Governing body and administration. (1) The hospital shall have a governing body responsible for adoption of policies concerning the purposes, operation and maintenance of the hospital, including safety, care, and treatment of patients.
 - (2) The hospital governing body shall:
- (i) Provide personnel, facilities, equipment, supplies, and services to meet the needs of patients within the purposes of the hospital.
- (ii) Appoint an administrator responsible for implementing the policies adopted by the governing body.
- (iii) Have authority and responsibility for the appointment and periodic reappointment of the medical staff.
- (iv) Require medical staff accountability to the governing body through approval under the medical staff organization bylaws and rules as applied by the governing body.
- (v) Require evidence that each individual granted clinical privileges pursuant to medical staff bylaws has appropriate and current qualifications.
- (vi) Require that each person admitted to the hospital is under the care of a member of the medical staff possessing clinical privileges.
- (3) The hospital shall establish and maintain a coordinated program for identification and prevention of malpractice according to RCW 70.41.200 to include:
- (a) Quality assurance committee including at least one member of the governing body with functions described in RCW 70.41.200;
- (b) Policies, procedures, systems, and practices to comply with RCW 70.41.200 related to:
- (i) Medical staff privileges sanction and individual physician review.
- (ii) Review of qualifications of persons delivering care in the hospital.
 - (iii) Resolution of grievances by patients.
- (iv) Continuous collection of information related to negative health care outcomes and injuries to patients.
- (v) Education programs and compliance with reporting requirements of RCW 70.41.200.
- (vi) Access by medical and osteopathic licensing and disciplinary boards to appropriate records of hospital decisions on restriction or termination of physician privileges.
- (4) Each hospital shall develop procedures for identifying potential organ and tissue donors as required in RCW 68.08.650.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 87-03-020 (Order 2463), § 248-18-031, filed 1/13/87. Statutory Authority: RCW 70.41.030 and 43.20-050. 84-17-077 (Order 275), § 248-18-031, filed 8/16/84.]

WAC 246-318-033 Medical staff. (1) There shall be a medical staff appointed by the governing body.

(2) Medical staff bylaws, rules, and regulations shall be subject to approval by the governing body. These bylaws and rules shall include qualifications for medical staff membership, procedures for delineation of hospital specific clinical privileges, and organization of the medical staff.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-033, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030 and 43.20.050. 84-17-077 (Order 275), § 248-18-033, filed 8/16/84.]

- WAC 246-318-035 Infection control program. Each hospital shall maintain an effective hospital wide program for the surveillance, prevention, and control of infection including:
- (1) Designation of an infection control committee to oversee the program with:
- (a) Multidisciplinary membership on the committee including representatives from medical staff, nursing, administration, and persons directly responsible for management of the infection control program;
- (b) Description of the program approved by the committee and including surveillance, prevention, and control activities;
- (c) Delegation of authority, approved in writing by administrative and medical staff, to institute surveillance, prevention, and control measures when there is reason to believe any patient or personnel may be at risk of infection;
 - (d) Regularly scheduled meetings at least quarterly;
- (e) Maintenance of written minutes and reports of findings presented during committee meetings; and
- (f) A method for forwarding recommendations to the medical staff, nursing, administration, quality assurance, and other committees and departments as appropriate.
- (2) Management of the infection control program by one or more persons with documented evidence of qualifications related to infection surveillance, prevention, and control including:
 - (a) Education;
 - (b) Training;
 - (c) Certification; or
 - (d) Supervised experience.
- (3) Establishing the following components of the infection control program:
- (a) Review of patient and personnel infections, as appropriate, to determine whether an infection is nosocomial using definitions and criteria established by the committee;
- (b) Written policies and procedures describing the types of surveillance carried out to monitor:
 - (i) Rates of nosocomial infections;
 - (ii) Systems used to collect and analyze data; and
 - (iii) Activities to prevent and control infections;
- (c) A system for reporting communicable diseases and following requirements under chapter 248–100 WAC, Communicable and certain other diseases;
- (d) A procedure for reviewing and approving infection control aspects of policies and procedures used in each area of the hospital;
- (e) Provision of consultation regarding patient care practices, equipment, and supplies influencing risk of infection;

- (f) Provision of consultation regarding appropriate procedures and products used for cleaning, disinfection, and sterilization:
- (g) Provision of information on infection control for orientation and in-service education of employees, and nonemployees performing direct patient care;
- (h) Development of recommendations, consistent with federal, state, and local laws and rules, on methods for the proper disposal to prevent unsafe or unsanitary conditions related to:
 - (i) Sewage;
 - (ii) Solid and liquid wastes; and
- (iii) Infectious wastes including safe management of sharps;
- (i) Defining indications for specific precautions to prevent transmission of infections;
- (j) Coordinating of or cooperating with the employee health activities relating to control of hospital exposure and transmission of infections to or from employees and others performing patient services;
- (k) Designing and monitoring of the physical environment of the hospital for infectious disease control.
- (4) Provision of the following in any hospital providing inpatient services for tuberculous patients:
- (a) Designated patient rooms for patients with suspected or known infectious tuberculosis including:
- (i) Ventilation to maintain a negative pressure condition in each patient room relative to adjacent spaces, except bath and toilet areas with:
- (A) Air movement or exhaust from the patient room to the out-of-doors;
- (B) Ventilation at the rate of six air changes per hour, exhaust; and
- (C) Make-up or supply air from adjacent ventilated spaces permitted only when a minimum of two air changes is tempered with outside air;
 - (ii) Ultraviolet generator irradiation as follows:
- (A) Use of ultraviolet fluorescent fixtures with lamps emitting wave length of 253.7 nanometers to irradiate ceiling and upper space of patient room;
- (B) The average reflected irradiance approximately 0.2 microwatts per square centimeter in the room at the five foot level;
- (C) Fixture installation conforming to the recommendations of the Illuminating Engineering Society Handbook, 5th edition, section 25, "Ultraviolet Energy";
- (D) Lamps changed as recommended by the manufacturer;
- (b) Transfer of discharge information to the health department of the patient's county of residence;
- (c) Mantoux tuberculin skin testing of employees in contact with infectious tuberculosis cases within one year of contact if regularly working in areas described under subsection (4)(a)(i) and (ii) of this section.
- (d) Tuberculin skin testing employees as required by the local health officer or the department for contact investigations. Positive skin tests for contact investigations are 5 mm induration read at forty-eight to seventy-two hours.

- (5) Implementation of a human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) education plan including:
- (a) Verifying or arranging for appropriate education and training of personnel on the prevention, transmission, and treatment of HIV and AIDS consistent with RCW 70.24.310; and
- (b) Use of infection control standards and educational material consistent with the department-approved curriculum manual KNOW HIV/AIDS, Prevention Education for Health Care Facility Employees, May 31, 1989, published by the office on HIV/AIDS.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–035, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 90–24–044 (Order 115), § 248–18–035, filed 11/30/90, effective 12/31/90. Statutory Authority: RCW 70.41.030 and 43.20.050. 89–21–039 (Order 4), § 248–18–035, filed 10/12/89, effective 11/12/89; Order 119, § 248–18–035, filed 5/23/75; Order 107, § 248–18–035, filed 1/13/75.]

- WAC 246-318-040 Personnel. (1) Hospitals shall employ sufficient qualified personnel to operate each department of the hospital with verification of required license, certification, or registration.
- (2) Hospitals shall ensure that nonemployees providing direct patient care comply with hospital policies and procedures.
- (3) Hospitals shall establish written job descriptions for each job classification, minimally including:
- (a) Job title, reporting relationships, summary of duties and responsibilities, and qualifications; and
- (b) Provisions for review every two years with revision when necessary.
 - (4) Hospitals shall:
- (a) Ensure a periodic performance appraisal of employees and volunteers related to:
 - (i) Satisfactory performance of assigned tasks; and
 - (ii) Competence in delivering health care services;
- (b) Document background checks required under RCW 43.43.830 through 43.43.842 for all prospective employees and volunteers who may have regularly scheduled unsupervised access to:
 - (i) Children under sixteen years of age;
 - (ii) Groups of children under certain circumstances;
 - (iii) The elderly;
 - (iv) The developmentally disabled;
- (v) Individuals declared mentally incompetent or unable to participate in consent to care given; and
 - (vi) Others as required under chapter 43.43 RCW;
- (c) Designate an employee responsible for volunteer services and activities;
- (d) Plan and implement orientation and education programs minimally to include:
 - (i) New employee and volunteer orientation for:
 - (A) Organizational structure;
 - (B) Building layout;
 - (C) Infection control;
 - (D) Safety, including the fire and disaster plan;
 - (E) Policies and procedures; and
 - (F) Equipment pertinent to the job;
- (ii) Employee continuing education for maintaining and improving skills;

- (iii) Documentation of orientation, in-service, and continuing education for employees; and
- (iv) HIV/AIDS training for employees as specified under WAC 248-18-035;
- (e) Establish a nursing service under the direction of a registered nurse to:
- (i) Provide for adequate numbers of registered nurses on duty at all times; and
- (ii) Require registered nurse supervision of employees and others performing nursing service functions;
- (f) Ensure adequate supervision of employees and nonemployees;
- (g) Maintain a current employee call back list for disasters;
- (h) Require each employee to have on employment a tuberculin skin test by the Mantoux method within thirty days of employment and as follows:
- (i) For new employees, a negative skin test is defined as less than ten millimeters of induration read at forty-eight to seventy-two hours. Employees with negative reactions to the first test and thirty-five years of age or older shall have a second test one to three weeks after the first test;
- (ii) New employees with positive reactions to either test shall have a chest x-ray within thirty days. Hospitals shall:
- (A) Retain records of test results, reports of x-ray findings, exceptions, or exemptions in the facility; and
 - (B) Provide a copy of test results to the employee;
 - (iii) Exclude from skin testing:
- (A) New employees documenting a positive Mantoux test in the past;
- (B) New employees providing documentation of meeting requirements under subsection (4)(h)(i) and (ii) of this section within the six months preceding the date of employment; and
- (C) An employee with a written waiver from the department after stating the tuberculin skin test by the Mantoux method presents a hazard to his or her health and presenting supportive medical data to the department tuberculosis control program;
- (i) Document the following when individuals request tuberculosis skin test waivers from the department:
- (i) Department notification of the individual requesting a waiver from tuberculosis skin testing and department decision; and
- (ii) Department advice to the individual employee and the hospital regarding department screening requirements if a waiver is granted.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 90–24–044 (Order 115), § 248–18–040, filed 11/30/90, effective 12/31/90; 86–08–086 (Order 2362), § 248–18–040, filed 4/2/86. Statutory Authority: RCW 70.41.030 and 43.20.050. 82–24–003 (Order 250), § 248–18–040, filed 11/18/82. Statutory Authority: RCW 43.20.050. 80–02–003 (Order 191), § 248–18–040, filed 1/4/80; Order 121, § 241–18–040, filed 9/18/75; Order 19, § 248–18–040, filed 5/23/75; Order 91, § 248–18–040, filed 10/3/73; Order 76, § 248–18–040, filed 1/9/73; Regulation 18.040, effective 3/11/60.]

- WAC 246-318-050 Water supply. (1) There shall be an adequate supply of hot and cold water under pressure which conforms to the quality standards of the department.
- (2) Hot water supplied for bathing and handwashing purposes shall be at a safe temperature.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-050, filed 12/27/90, effective 1/31/91; Order 119, § 248-18-055, filed 5/23/75.]

WAC 246-318-060 Plumbing. The water supply plumbing, the fixtures, and the waste and drainage system of the hospital shall be maintained so as to avoid insanitary conditions.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as \$ 246-318-060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 79-04-004 (Order 175), \$ 248-18-060, filed 3/9/79; Order 119, \$ 248-18-060, filed 5/23/75; Regulation 18.060, effective 3/11/60.]

- WAC 246-318-070 Staff facilities. (1) Adequate and conveniently located toilet and lavatory facilities shall be provided for employees separate from patient facilities.
- (2) Paper towels in a satisfactory dispenser or some other acceptable type of single use towels and a satisfactory receptacle for used towels shall be provided at all plumbing fixtures used for handwashing.
- (3) Dressing rooms for surgical, delivery, and nursery department personnel should be provided within these areas to facilitate changing to scrub uniforms.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \$246-318-070, filed 12/27/90, effective 1/31/91; Order 119, \$248-18-070, filed 5/23/75; Regulation 18.070, effective 3/11/60.]

WAC 246-318-080 Storage. There shall be a sufficient amount of suitable storage space throughout the hospital for all supplies and equipment.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-080, filed 12/27/90, effective 1/31/91; Order 119, § 248-18-080, filed 5/23/75; Regulation 18.080, effective 3/11/60.]

WAC 246-318-090 Heating. All heating systems shall be maintained and operated in a manner to provide a comfortable temperature for patients and personnel.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as \$ 246-318-090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 79-04-004 (Order 175), \$ 248-18-090, filed 3/9/79; Order 119, \$ 248-18-090, filed 5/23/75; Regulation 18.090, effective 3/11/60.]

WAC 246-318-100 Lighting and wiring. All usable rooms and areas of the hospital shall be lighted adequately by natural and/or artificial light. Appropriate electrical service shall be provided in all areas of the hospital adequate to meet the electrical demand of the equipment or fixtures used in these areas.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \$246-318-100, filed 12/27/90, effective 1/31/91; Order 119, \$248-18-100, filed 5/23/75; Regulation 18.100, effective 1/11/61.]

- WAC 246-318-110 Emergency light and power. (1) Flashlights or battery-operated lamps shall be available to employees and kept in operating condition.
- (2) Adequate emergency lighting and power shall be available.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 79-04-081 (Order 176), § 248-18-110, filed 4/2/79; Order 119, § 248-18-110, filed 5/23/75; Regulation 18.110, effective 3/11/60.]

WAC 246-318-120 Ventilation. All patient rooms, all rooms in which personnel routinely work and the rooms which, because of use, might have objectionable odors and/or excessive condensation shall be adequately ventilated by windows, ducts or mechanical means.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-120, filed 12/27/90, effective 1/31/91; Order 119, § 248-18-120, filed 5/23/75; Regulation 18.120, effective 1/11/61.]

- WAC 246-318-130 Corridors and doors. (1) Corridor and door widths shall be adequate to permit the free movement of patients on standard size wheeled stretchers.
- (2) Doors shall not swing into the corridors so as to constitute a hazard.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-130, filed 12/27/90, effective 1/31/91; Order 119, § 248-18-130, filed 5/23/75; Regulation 18.130, effective 3/11/60.]

- WAC 246-318-135 Carpets. (1) Carpets may be used in the following nonpatient occupied areas: Administrative areas; lobbies, lounges; waiting area; chapels, nurses' station; dining rooms; corridors; equipment alcoves opening onto carpeted corridors. Carpets may be used in other areas only upon written approval of such use by the department.
- (2) Carpets may be used in the following patient occupied areas: Patient rooms (excluding toilets and bathrooms); coronary care units; recovery rooms (not within surgical suites); labor rooms (not within delivery suites); corridors within patient occupied areas; dayrooms; equipment alcoves opening onto carpeted corridors. Carpets may be used in other areas only upon written approval of such use by the department. Carpets should not be used in dialysis units or wet patient care areas.
- (3) Specifications for carpeting in the above patient occupied areas and nonpatient occupied areas:
- (a) Fiber and pads which meet the standards of state and local fire codes are acceptable provided the fiber is easily cleanable.
- (b) Carpets shall be constructed or treated to prevent or reduce static electricity build up.
- (4) The installation of carpets shall be such as to assure the safety of patients, staff and visitors.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–135, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 79–04–004 (Order 175), § 248–18–135, filed 3/9/79; Order 119, § 248–18–135, filed 5/23/75; Order 9, § 248–18–135, filed 1/2/69; Regulation 18.135, filed 8/4/67.]

- WAC 246-318-140 Stairways, ramps, and elevators. (1) When vertical transportation of patients is necessary, adequate elevators or ramps shall be provided.
- (2) All stairways and ramps shall have nonskid surfaces.
- (3) Stairways and ramps shall have handrails on both sides.
- (4) Open stairs and ramps shall have adequate protection.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-140, filed 12/27/90, effective 1/31/91; Order 119, § 248-18-140, filed 5/23/75; Regulation 18.140, effective 3/11/60.]

- WAC 246-318-150 Maintenance. (1) The hospital, its component parts, facilities, and equipment shall be kept clean and in good repair and be maintained with consideration for the safety and well-being of the patients, staff, and visitors. The maintenance department shall function in accordance with written hospital policies and procedures.
- (2) Responsibility for maintenance shall be delegated to qualified personnel familiar with the hospital's equipment and/or systems. Personnel policies, job descriptions, records of orientation and in-service training shall be documented.
- (3) A scheduled preventive maintenance program with a system of equipment identification shall be established for patient care and physical plant equipment.
- (a) Equipment shall be kept clean, calibrated, adjusted, and in good repair.
- (b) A written plan shall define the inspection and inspection interval for items and/or categories of equipment. Records shall be maintained to reflect the dates of inspection and maintenance of equipment and the name of the person who did the inspection.
- (4) Written procedures shall specify the action to be taken in the event of failure of essential equipment and major utility services. The written procedures shall include a system for summoning essential personnel and outside assistance when required.
- (5) Manufacturer's specifications, maintenance and operation procedures appropriate for the hospital's maintenance policies should be retained and filed for access and reference.
- (6) Written procedures shall specify areas and equipment requiring specific infection control measures.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–150, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 79–04–004 (Order 175), § 248–18–150, filed 3/9/79; Order 119, § 248–18–150, filed 5/23/75; Order 9, § 248–18–150, filed 1/2/69; Regulation 18.150, filed 8/4/67; Regulation 18.150, effective 3/11/60.]

- WAC 246-318-155 Housekeeping. (1) A safe and sanitary environment shall be maintained for all areas of the hospital through the use of sufficient personnel, equipment and procedures.
- (2) Adequate, clean housekeeping equipment shall be provided and maintained to meet the needs of the hospital. Carpet vacuum equipment used in patient occupied

- areas must be equipped with a fine particle retention filter
- (3) Written policies and procedures shall specify daily and periodic cleaning schedules and routines and cleaning between occupancies. There shall be written policies and procedures for cleaning of isolation rooms and other specialized areas.
- (4) There shall be effective, safe cleaning and disinfecting agents used with written procedures available.
- (5) An effective insect and rodent control program shall be maintained.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–155, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 79–04–004 (Order 175), § 248–18–155, filed 3/9/79.]

- WAC 246-318-160 Laundry. (1) The laundry and linen service shall have adequate space and equipment for storage, sorting and processing of clean and soiled linen/laundry.
- (a) Separation between clean and soiled linen/laundry shall be maintained during sorting, processing, transporting, and storage of linen/laundry.
- (b) Soiled and clean linen/laundry shall be handled in a way which minimizes contamination risks.
- (i) Soiled linen/laundry from isolation and septic surgical cases shall be bagged and marked for special handling.
- (ii) There shall be an adequate supply of hot water at a minimum temperature of 160 degrees F.; 71.1 degrees C., with use of appropriate disinfecting agents.
- (c) Procedures shall be established to provide for clean linen/laundry free of toxic residues.
- (2) The hospital shall maintain an adequate supply of linen/laundry through a linen/laundry control system.
- (3) A clean and safe environment with adequate ventilation and lighting shall be maintained.
- (a) Positive clean air flow shall be maintained in clean linen/laundry areas which are within the laundry.
- (b) Negative soiled air flow shall be maintained in soiled linen/laundry areas which are within the laundry.
- (c) Chemical or soap product containers shall be clearly labeled.
- (d) The use and precautionary procedures shall be defined and posted for chemical agents and soap products.
- (4) The laundry and linen service shall be adequately staffed.
- (a) Orientation and in-service, including infection control and safe laundry practices, shall be provided for laundry and linen service personnel.
- (b) Written policies and procedures shall specify scheduled activities and routines of personnel working in the laundry and/or linen areas.
- (5) If contracted services are used, the hospital shall insure that all requirements, except requirements in subsection (4) of this section, are met through:
- (a) An annual on-site visit (inspection), of the complete physical plant(s) of any contract laundry which

provides any service to or for the hospital shall be conducted by (a) member(s) of the hospital infection control committee (or the equivalent designated committee). This annual visit (inspection), as a minimum requirement, shall be done by that member of the hospital infection control committee (or equivalent designated committee), who has the most expertise in the field of infection control and shall be documented by that committee in a record which the hospital shall retain.

- (b) A written agreement between the hospital and any facility which provides laundry services to and for the hospital requiring that applicable provisions of this section (see subsection (5) of this section), be met by the laundry provider, and allowing for immediate termination of the contract for failure to comply with any of the applicable provisions hereof, provided this subsection shall not be effective relative to any contract which was in existence prior to the effective date of this subsection, provided, however, that no such contract may be extended, renewed or otherwise held in effect beyond its termination date, as stated on the effective date hereof.
- (c) The hospital which uses contract laundry services shall meet the requirements specified in subsection (4) of this section, as applicable, for any hospital employees who are involved with distribution, handling or storage of the linen/laundry, whether cleaned or soiled.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–160, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 79–04–081 (Order 176), § 248–18–160, filed 4/2/79; Order 119, § 248–18–160, filed 5/23/75; Regulation 18.160, effective 3/11/60.]

WAC 246-318-170 Sewage, garbage, and waste. (1) All sewage, garbage, refuse, and liquid wastes shall be collected and disposed of in a manner to prevent the creation of an unsafe or insanitary condition or nuisance.

- (2) Contaminated dressings, used dressings, surgical and obstetrical wastes, and other similar materials shall be handled in a satisfactory manner and finally disposed of in an incinerator or by another approved method.
- (3) Procedures shall be developed which specify the safe disposal of needles, knife blades, chemicals, and other potentially dangerous wastes.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–170, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 79–04–004 (Order 175), § 248–18–170, filed 3/9/79; Order 119, § 248–18–170, filed 5/23/75; Regulation 18.170, effective 3/11/60.]

WAC 246-318-180 Dietary and/or food service. Each hospital shall have an organized dietary and/or food service.

- (1) There shall be a designated individual responsible for management of dietary and/or food service. Personnel from dietary and/or food service shall be present in the hospital during all patient meal times.
- (2) The dietary and/or food service shall incorporate the ongoing and regularly scheduled input of a dietitian. A dietitian shall be responsible for developing policies and procedures for adequate nutritional and dietary

consultation services for patients and food service. Patient consultation shall be documented in the medical record.

- (3) At least three scheduled meals a day shall be served at regular intervals with not more than fifteen hours between the evening meal and breakfast. Snacks of nourishing quality shall be available at all times.
- (4) Meals and nourishments shall provide a variety of food of sufficient quantity and quality to meet the nutritional needs of each patient. Unless contraindicated, Recommended Dietary Allowances, Ninth edition, 1980, the Food and Nutrition Board of the National Research Council, adjusted for activity, shall be used.
- (5) Written menus shall be planned in advance and approved by a dietitian. Substitutes shall be of similar nutritional value, as approved by a dietitian. A record of the planned menus, with substitutions as served, shall be retained for one month.
- (6) There shall be written orders (by an authorized individual) for all patient diets. Diets shall be prepared and served as prescribed. A current diet manual, approved in writing by the dietitian and medical staff, shall be used for planning and preparing diets.
- (7) Food service sanitation shall be in compliance with chapter 248-84 WAC Food service sanitation, except for WAC 248-84-070.
- (8) There shall be current written policies and procedures to include safety, infection control, food acquisition, food storage, food preparation, management of food not provided or purchased by dietary/food service, serving of food, and scheduled cleaning of all food service equipment and work areas.
- (9) There shall be current written policies and procedures, with documentation of orientation and inservice, of dietary and food service employees.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–180, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030 and 43.20.050. 83–07–048 (Order 257), § 248–18–180, filed 3/18/83; Order 119, § 248–18–180, filed 5/23/75; § 248–18–180, filed 12/6/67; Regulation 18.180, effective 3/11/60.]

WAC 246-318-190 Patient care services, general. (1) Policies, procedures, and techniques.

- (a) Hospitals shall establish written policies and procedures which specify the criteria for admission of patients to general and specialized patient care service areas and conditions requiring transfer. These policies and procedures shall be based upon the availability of sufficient and appropriate personnel, space, equipment, and supplies to provide care and treatment of patients.
- (b) There shall be written patient care policies and procedures designed to guide personnel. The policies and procedures should be reviewed at least one time every two years, revised as necessary, and approved in writing by appropriate representatives of the administrative, medical, and nursing service.
- (c) There shall be procedures and provision for personnel to gain immediate access to patient rooms, toilets, showers, and bathrooms should any emergency occur to a patient in any one of these areas.

- (d) The hospital shall establish safety policies and procedures for the care of all patients with special consideration for patients who because of age or condition are not responsible for his or her acts.
- (e) There shall be policies and procedures addressing protection of patients from assault, abuse, and neglect. All patient care personnel and staff should be oriented and educated regarding preventing and reporting abuse of patients.
- (f) Written policies and procedures shall address immediate actions or behaviors of personnel and staff when patient behavior indicates that he or she is assaultive, out of control, or destructive.
- (g) Adequate nursing care shall be provided to all patients:
- (i) A patient care plan and/or nursing care plan shall be developed by or in conjunction with a registered nurse. There shall be documentation in the medical record of discharge planning.
- (ii) Discharge assessment shall be completed on all patients with discharge planning as indicated.
- (h) There shall be a reliable method for personal identification of each patient.
- (i) A recognized standard procedure for the handling and administration of blood and blood products shall be established. This procedure shall be written and readily available to all personnel responsible for the administration of blood and/or blood products.
- (j) A standard isolation technique shall be established and practiced.
- (k) There shall be written policies governing smoking by personnel, patients, visitors, and others within the hospital. Policies shall be designed to prohibit smoking where or when smoking may cause discomfort to a patient or constitute a safety hazard.
- (l) A physical examination and medical history shall be documented within forty-eight hours of admission unless completed within one week prior to admission and incorporated into the medical record.
- (m) Each patient care service area shall have available current references which are appropriate to the general and specific care provided in that area or unit.
- (n) Written policies and procedures shall be established, available to, and followed by personnel and medical staff in patient care areas who handle, manage, control, prescribe, dispense, or administer medications or drugs. Drugs are those substances and articles defined in chapter 69.41 RCW.
- (i) All policies and procedures related to drugs shall be approved by the appropriate medical staff committee in collaboration with the pharmacist who directs the hospital pharmacy with evidence of discussion of and attention to concerns of an advisory interdisciplinary group minimally to include representatives from medical staff, hospital administration, and nursing service. Policies and procedures need not be identical in all patient care areas.
- (ii) Written order or prescription by members of medical staff authorized by state rule or law to prescribe drugs pursuant to chapter 69.41 RCW shall be required for all medications administered to patients or self-administered by patients within the hospital.

- (iii) Medication administration policies and procedures shall be established and followed in patient care areas minimally to address:
- (A) Composition of a medication or drug order, i.e., date, type and amount of drug, route, frequency of administration, and authentication by medical staff authorized to prescribe drugs pursuant to chapter 69.41 RCW.
- (B) Requirements for authorized personnel administering drugs or medications in accordance with state laws and regulations governing such acts.
- (C) Requirements for personnel authorized to receive and record or transcribe verbal or telephone drug orders, in accordance with laws and regulations governing such acts, e.g., pharmacists, physicians, and licensed nurses.
- (D) Timely authentication of verbal and telephone orders by medical staff authorized to prescribe drugs, not to exceed forty-eight hours for inpatient orders.
- (E) Requirements for specific written orders, identification of drug, administration, handling, proper storage, control, or disposition of medications (drugs) owned by the patient, other than those dispensed by the hospital pharmacy.
- (F) Requirements for self-administration of medications.
 - (iv) Medications located in patient care areas shall:
- (A) Be the responsibility of the pharmacist directing the hospital pharmacy;
- (B) Bear a legible label including generic and/or trade name and strength according to federal and state law:
- (C) Be stored under appropriate conditions and in accordance with general or specific directions of a hospital pharmacist; and
- (D) Be accessible only to those personnel authorized access by hospital policy.
- (v) Outdated or deteriorated drugs, as indicated by label, shall be prohibited in patient care areas.
- (vi) A hospital pharmacist shall be responsible for assuring appropriate disposition, destruction, and disposal of drugs intended for patient use in patient care areas.
- (vii) Storage, distribution, record keeping, appropriate dissemination of information, and control of approved investigational drugs or medications used in the hospital shall be the responsibility of the pharmacist who directs hospital pharmacy.
 - (2) Patient care.
- (a) Space or spaces of adequate size shall be designated on each nursing unit which has provisions for medical records, access to telephones, a place for recording and reviewing medical records, and provision for confidential communication among personnel and staff.
- (b) Utility or materials room or rooms or space. On or adjacent to each nursing unit an adequate, properly equipped, utility or materials room shall be provided for the preparation, cleaning, and storage of nursing supplies and equipment used on the nursing unit. This utility or materials room shall be so arranged as to provide for separation of clean and soiled supplies and equipment.
 - (c) Toilet and bathing facilities.

- (i) There shall be at least one water closet, lavatory, and bathing facility reserved for patient use on each patient floor, and such additional toilets, lavatories, and bathing facilities to adequately meet the needs of the patients.
- (ii) Grab bars properly located and securely mounted shall be provided at patient bathing facilities and water closets
- (iii) Some means of signalling by the patient while in the toilet, tub, or shower room shall be provided in a proper location and shall provide an audio and/or visual signal in the nurses' station or an equivalent area.
- (iv) A lavatory shall be provided in or convenient to every toilet room.
- (v) Paper towels or some other acceptable type of single use towel and a satisfactory receptacle for used towels shall be provided at all lavatories.
- (vi) Soap or equivalent shall be immediately available at sink or lavatory.
- (d) Isolation room or unit. Rooms or units which are used for isolation of patients with known or suspected infectious diseases shall contain a lavatory.
- (e) Seclusion and/or security room. When special accommodations are provided for seriously disturbed patients, the layout, design of details, equipment, and furnishings shall be such that patients are under close observation and are not afforded opportunities for hiding, escape, injury to self or others.
- (f) Storage and handling of drugs in patient care areas.
- (i) Medicines, poisons, and other drugs shall be stored in a specifically designated, well-illuminated, secure space. Drugs shall be accessible only to hospital authorized individuals. A means for separation of internal and external stock drugs shall be provided.
- (ii) A separate locked drawer, compartment, cabinet, or safe shall be provided for the storage of Schedule II drugs.
- (iii) Suitable facilities including ample light, ventilation, sink or lavatory, and sufficient work areas shall be provided for the preparation and storage of drugs for patients.
 - (g) Patient room facilities.
- (i) All patient rooms shall be outside rooms with adequate windows of clear glass or other approved transparent material.
- (ii) Single rooms shall contain at least eighty square feet and multi-bed rooms shall contain at least seventy square feet per adult bed and youth bed or crib, and forty square feet per pediatric bassinet.
- (iii) Rooms shall have at least seven and one-half foot ceiling height over the required square feet area.
- (iv) The floor of any room used for accommodation of a patient shall be less than three feet six inches below grade.
 - (v) There shall be at least three feet between beds.
- (vi) Rooms shall be arranged to allow for movement of necessary equipment to the side of each bed.
- (vii) There shall be sufficient and satisfactory storage space for clothing, toilet articles, and other personal belongings of patients.

- (viii) Sufficient electrical outlets shall be provided to permit the use of electrical equipment as required.
 - (h) Patient room furnishings.
- (i) An appropriate bed with mattress, pillow, and necessary coverings shall be provided for each patient. Mattresses, blankets, and pillows shall be clean and in good repair.
- (ii) There shall be a bedside stand or cabinet and chair for use in each patient room, when appropriate.
- (iii) Means for signalling nurses shall be provided within easy reach of each bed, when appropriate.
- (iv) A sufficient number of cubicle curtains or screens shall be available to assure privacy for patients, when indicated.
- (v) A properly designed bed lamp shall be provided at each bed, when appropriate.
 - (3) Supplies and equipment for patient care.
- (a) There shall be sufficient, safe, and appropriately maintained equipment and supplies for patient care.
- (b) Bedside utensils supplied to patients shall be for individual use only.
- (c) All supplies and equipment used in patient care shall be properly cleaned and/or sterilized between use for different patients.
- (d) Methods for cleaning, handling, and storing all supplies and equipment shall be such as to prevent the transmission of infection through use.
- (e) Equipment and furnishings, including medical and nonmedical devices, shall be safe, located, and arranged in a manner which does not endanger patients.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–190, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 43.20.050 and 70.41.030. 84–02–036 (Order 271), § 248–18–190, filed 12/30/83. Statutory Authority: RCW 43.20.050 and chapter 70.41 RCW. 81–22–014 (Order 216), § 248–18–190, filed 10/23/81; Order 119, § 248–18–190, filed 5/23/75; Regulation 18.190, effective 3/11/60.]

- WAC 246-318-200 Abuse reports—Children and developmentally disabled adults. A suspected incident of nonaccidental injury, neglect, sexual abuse, or cruelty to a child or developmentally disabled person by a person who appears to be legally responsible for that individual's welfare shall be reported to a law enforcement agency or the department.
- (1) Practitioners obligated to report suspected abuse include licensed practical and registered nurses, physicians and their assistants, podiatrists, optometrists, chiropractors, dentists, social workers, psychologists, and pharmacists.
- (2) The hospital shall make orientation materials, which inform practitioners of their reporting responsibilities, available to practitioners who are employees or who practice within the hospital. The department shall prepare and distribute these materials.
- (3) The hospital shall post in each primary patient care unit notices provided by the department which include appropriate local police and department phone numbers and which state the reporting requirements.
- (4) The medical record of the person who may have been abused by a responsible individual shall reflect the fact that an oral or written report has been made to the

department or a law enforcement agency. This note shall contain the date and time that the report was made, the agency to which it was made, and be signed by the person making the report. The contents of the report need not be included in the medical record.

(5) Conduct conforming with reporting requirements of this section or chapter 26.44 RCW shall not be deemed a violation of the confidential communication privilege of RCW 5.60.060(3) and (4) and 18.83.110.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-200, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 78-08-060 (Order 162), § 248-18-202, filed 7/24/78.]

WAC 246-318-210 Pediatric services. (1) Hospitals admitting, treating, or diagnosing infants, children, and adolescents shall have readily available equipment and supplies of appropriate sizes including:

- (a) Intubation equipment;
- (b) Oxygen masks and ventilatory bags;
- (c) Blood pressure cuffs;
- (d) Stethoscope;
- (e) Defibrillator and paddles;
- (f) Emergency medications;
- (g) Intravenous equipment and supplies; and
- (h) Measuring devices for length, height, weight, and circumferences.
- (2) Hospitals providing services for infants, children, and adolescents shall establish written policies and procedures specific to pediatric services, consistent with WAC 248-18-190 (2)(g), 248-18-202, and 248-18-336 and minimally including:
 - (a) Admission criteria;
 - (b) Conditions requiring transfer or transport;
- (c) Room assignment of infants and children considering requirements for observation and developmental age level needs;
- (d) Safety measures in terms of equipment, including but not limited to:
 - (i) Cribs, bassinets, and beds;
 - (ii) Restraint use;
 - (iii) Side rails;
 - (iv) Electrical outlet protection; and
 - (v) Toys.
- (e) Placement of infants, children, and adolescents with infection, suspected infection, or exposure to infection;
- (f) Nutritional guidelines for infants, children, and adolescents to include normal diets and diets for special nutritional needs;
- (g) Safe administration of pediatric doses of blood, blood products, medications, intravenous fluids, and admixtures including:
 - (i) Intake and output;
- (ii) Precalculated dosages of emergency drugs immediately available or posted;
- (iii) An established list of pediatric dosages approved by the hospital pharmacist and the physician responsible for medical policies in pediatric services;
- (iv) List of agents requiring double checking prior to administration; and

- (v) Hospital-approved method of double checking by appropriately licensed personnel or medical staff which include nurses, physicians, or pharmacists.
- (3) Hospitals providing organized, distinct pediatric units or service areas shall provide and establish:
 - (a) An accessible examination or treatment area;
 - (b) A sufficient area for diversional play activities;
- (c) Criteria and procedures for use of established areas for isolation;
- (d) Medical services directed by a physician member of medical staff having experience in treatment of infants, children, and adolescents whose functions and scope of responsibility are delineated by medical staff;
- (e) Review of policies, procedures, protocols, and standing orders as necessary and at least every two years with revision as necessary;
- (f) A registered nurse responsible for implementation of nursing policies and procedures;
- (g) Adequate nursing staff for the pediatric unit or service area available to perform all the specialized nursing skills required.
- (4) Hospitals providing nurseries in pediatric services or elsewhere in the hospital shall meet requirements for intermediate care nursery or neonatal intensive care nursery under WAC 248-18-224.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-210, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 89-22-106 (Order 010), § 248-18-216, filed 11/1/89, effective 12/2/89.]

WAC 246-318-220 Obstetrical services. (1) Hospitals providing obstetrical services shall provide:

- (a) Medical services directed by a physician member or members of the medical staff having experience in obstetrics and newborn care, whose functions and scope of responsibility are delineated by the medical staff;
- (b) Adequate staff supervised by a registered nurse, prepared by education and experience in obstetrical and newborn care nursing;
- (c) Capability for performing caesarean sections twenty-four hours per day.
- (2) Hospitals providing obstetrical services shall establish written policies and procedures to include:
- (a) Infection control principles under WAC 248-18-035 including:
- (i) Room assignment and placement of obstetrical patients and newborns;
 - (ii) Visitors;
- (iii) Special clothing requirements for staff and visitors;
 - (iv) Handwashing, posted as appropriate;
 - (v) Isolation;
 - (vi) Employee health; and
- (vii) Handling and storage of breast milk and formula.
- (b) Screening criteria to ascertain patients appropriate for each option of labor, delivery, postpartum, and newborn care;
- (c) Provisions for transfer and transport of a woman or a newborn to obtain a more intensive level of medical and nursing care;

- (d) Deliveries occurring outside the obstetrical service area or areas;
- (e) Requirement for authentication of all orders, standing orders, and protocols with:
- (i) Delineation of the circumstances when a particular protocol is used;
- (ii) Provisions for notification of appropriate medical staff;
- (iii) Description of minimum qualifications or training of persons required to execute a particular order or protocol;
- (iv) Written approval of policies, standing orders, and protocols by appropriate representatives of the medical, nursing, and administrative staffs;
- (v) Orders for drug or treatment administration including:
- (A) A description of the treatment with the name of each drug or agent;
- (B) The dosage and concentration of the drug or agent;
 - (C) The route or method of administration; and
- (D) Where pertinent, the time interval, frequency, or duration of administration.
- (f) Requirements for documenting orders and protocols in the patient's medical record;
- (g) Provision for maintaining body heat of each newborn;
- (h) Provision for intrapartum evaluation of fetal heart rate;
- (i) Procedures and protocols for the management of obstetrical and newborn emergencies, including resuscitation;
- (j) Review of policies, procedures, protocols, and standing orders as necessary and at least every two years with revisions if necessary; and
 - (k) Recordkeeping including, but not limited to:
- (i) Specific notes describing the status of mother, fetus, and newborn during labor, birth, and postpartum;
- (ii) Completion of birth and death certificates as necessary;
- (iii) Hospital staff's verification of initial and discharge identification of the newborn;
- (iv) Documentation that the newborn screening test was obtained and forwarded, as required under RCW 70.83.020 and chapter 248-103 WAC, now or as hereafter amended;
- (v) Documentation of newborn eye treatment, required under RCW 70.24.040 and chapter 248-100 WAC, now or as hereafter amended; and
- (vi) Medical records register or registers and index or indexes described under WAC 248-18-440.
 - (3) A hospital providing obstetrical services shall:
- (a) Designate and maintain facilities and equipment for care of woman, fetus, and newborn either in:
- (i) Labor rooms with birth occurring in a delivery room; or
- (ii) Birthing rooms including labor, delivery, recovery and labor, delivery, recovery, post partum services; or
- (iii) A combination of labor, delivery, and birthing rooms; or
 - (iv) Rooming-in, if provided.

- (b) Locate any hospital room designated by the hospital as a labor room within the obstetrical service area;
- (c) Utilize rooms designated by the hospital as labor rooms:
- (i) For short-term patient occupancy of twenty-four hours or less; or
- (ii) For patients in labor only unless the room meets the requirements for a patient room described under WAC 248-18-190.
- (d) Maintain accommodations and environment in obstetrical delivery rooms, if present, including:
- (i) Lighting and equipment for care of woman, fetus, and newborn during delivery including requirements described under WAC 248-18-251(2);
- (ii) A minimum area of two hundred and seventy square feet with a minimum linear dimension of fifteen feet; and
- (iii) A minimum room temperature of at least sixtyeight degrees Fahrenheit with a reliable method for monitoring temperature.
- (e) Maintain systems for scrub up, clean up, sterilization, storage, housekeeping, and staff change room facilities; and
- (f) Meet requirements described under WAC 248–18–253 and 248–18–256 for anesthesia and post-anesthesia recovery.
- (4) Hospitals providing birthing or delivery services shall provide sufficient and appropriate area in rooms to accommodate not only patients, staff, and designated attendants, but also furnishings and equipment for the care of the woman, fetus, and newborn including:
- (a) Adequate and appropriate equipment and supplies as follows:
- (i) A bed or equivalent suitable for labor, birth, and post partum;
- (ii) Oxygen with individual flow meters and mechanical suction for woman and newborn;
- (iii) Newborn resuscitation bag, masks, endotracheal tubes, laryngoscopes, oral airways, and mechanical suction in the room for each birth;
- (iv) Emergency equipment, medications, and supplies for care of newborn and woman required under WAC 248-18-251 (2)(b)(ii);
 - (v) Newborn beds available;
 - (vi) Radiant heat source available for the newborn;
- (vii) General lighting source and provision for examination lights;
- (viii) A clock with a sweep hand or equivalent second indicator visible from each patient's bedside;
- (ix) Provision for receiving, covering, and transporting soiled linens and waste materials;
- (x) Appropriate storage for necessary linens, instruments, supplies, medications, and equipment;
 - (xi) Work surfaces;
- (xii) A signal device for use by staff and accessible to summon emergency back-up personnel when needed;
- (xiii) Emergency power for lighting and operation of equipment;
- (xiv) Easily cleanable floors, walls, cabinets, ceilings, and furnishings; and
 - (xv) Fetal monitoring equipment.

- (b) Additional requirements if birthing rooms are provided including:
 - (i) A lavatory located within each birthing room;
- (ii) A designated lavatory and water closet conveniently located for use of patient and support person or persons;
 - (iii) A bathing facility convenient for patient use;
- (iv) Wardrobe unit or closets in the vicinity for the belongings of the patient and her support person or persons;
 - (v) A signaling device accessible for each woman; and
- (vi) Room temperature of at least sixty-eight degrees Fahrenheit maintained with a reliable method for monitoring.
- (5) Hospitals may use an operating room as a delivery room if the hospital has established policy and procedures about use of operating rooms including establishing priority over routine obstetrical procedures and nonemergent surgical procedures for:
 - (a) Patients with parturition imminent;
- (b) Patients with obstetrical emergencies requiring immediate medical intervention to preserve life and health of woman and infant.
- (6) Any hospital providing obstetrical services shall provide appropriate newborn care including, but not limited to:
- (a) Devices for measuring weight, length, and circumference;
 - (b) Access to and availability of portable x-ray;
- (c) Provisions for stabilization, transfer, and transport of high-risk newborns and infants;
- (d) An established system to identify newborns prior to separation from mother;
- (e) Established policies and procedures minimally including:
 - (i) Ongoing clinical assessment of newborn or infant;
- (ii) Provisions for direct supervision of each newborn by nursing staff and family in a nonpublic area, considering:
 - (A) Physical well being;
 - (B) Safety; and
 - (C) Security, including prevention from abduction.
- (f) Access to oxygen, oxygen analyzers, warmed and humidified oxygen, resuscitation equipment, emergency equipment, measuring devices, mechanical suction, medical air and supplies specifically for infants and newborns.
- (7) Hospitals with a newborn and infant nursery shall provide services, facilities, and equipment including:
 - (a) Requirements in subsection (6) of this section;
- (b) Wall clock with sweep second hand or equivalent second indicator visible from each nursery room;
- (c) Oxygen source with provision for warming, humidifying, analyzing, and blending oxygen;
- (d) A nursery room or rooms with at least twenty square feet per bassinet and with sufficient room to move between bassinets;
- (e) Handwashing facilities located at the entrance to the nursery and in each nursery room;
- (f) Emergency call systems from the nursery to another nearby appropriately staffed area;

- (g) A system to maintain an environmental temperature of at least sixty-eight degrees Fahrenheit; and
- (h) Appropriate emergency equipment, medications, and supplies for infant care and as required under WAC 248-18-251 (2)(b).

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–220, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.41 RCW. 90–12–014 (Order 061), § 248–18–221, filed 5/30/90, effective 6/30/90. Statutory Authority: RCW 70.41.030. 89–22–106 (Order 010), § 248–18–221, filed 11/1/89, effective 12/2/89.]

- WAC 246-318-230 Intermediate care nursery service—Neonatal intensive care nursery service. (1) Hospitals providing intermediate care nursery services or neonatal intensive care nursery services or both shall meet requirements described under WAC 248-18-221 (6) and (7).
- (2) Additional requirements for hospitals providing intermediate care nursery service include:
- (a) Infant stations having adequate space within each station to accommodate equipment, supplies, and staff required for treatment of intermediate care infants;
- (b) Provision for emergency power to support equipment requirements for each infant station;
 - (c) Oxygen, air, and suction capabilities including:
- (i) One oxygen outlet in each infant station with other sources of oxygen available;
- (ii) One medical air source available for each infant station;
- (iii) Provision for blending, warming, humidifying, and monitoring oxygen mixtures; and
- (iv) One electrical-mechanical or pneumatic suction in each infant station with other mechanical suctions available in the hospital.
- (d) All equipment and supplies for infant resuscitation immediately available and present within the intermediate care nursery service area;
- (e) One cardiorespiratory monitor in the intermediate care nursery area and others available;
- (f) Sufficient micro-volumetric infusion pumps available;
 - (g) A waiting and instruction area available;
- (h) A registered nurse responsible for neonatal nursing and implementation of policies;
- (i) Provision of adequate nursing staff for the intermediate care nursery available to perform all the specialized nursing skills required;
- (j) Laboratory, pharmacy, radiological, and respiratory care services appropriate for infants available at all times and in the hospital during assisted ventilation;
- (k) Medical staff with experience in neonatal medicine available at all times during assisted ventilation;
- (1) A physician with experience in neonatal medicine who is continuously available to come to the hospital as required;
- (m) Medical services directed by a physician member or members of the medical staff having experience in neonatal intensive care whose functions and scope of responsibility are delineated by the medical staff;
- (n) Requirements for authentication of all orders, standing orders, and protocols when used with:

- (i) Delineation of the circumstances when a particular protocol is used;
- (ii) Provision of notification of appropriate medical staff:
- (iii) Description of minimum qualifications or training of persons required to execute a particular order or protocol;
- (iv) Written approval of policies, standing orders, and protocols by appropriate members of the medical, nursing, and administrative staffs;
- (v) Orders for drug or treatment administration including:
- (A) A description of the treatment with the name of each drug or agent;
- (B) The dosage and concentration of the drug or agent;
 - (C) The route or method of administration; and
- (D) Where pertinent, the time interval, frequency, or duration of administration.
- (vi) Review of policies, procedures, protocols, and standing orders at least every two years with revisions as necessary.
- (o) A hospital-approved procedure for double checking certain drugs, biologicals, and agents by appropriately licensed personnel or medical staff including nurses, physicians, and pharmacists.
- (3) Hospitals providing neonatal intensive care nursery service shall meet requirements described under WAC 248-18-221(6) and subsection (2) of this section, and additionally provide:
- (a) At least fifty square feet within each infant station;
- (b) Twelve electrical outlets, with at least eight clearly identified as being on emergency power, available in each infant station;
 - (c) Oxygen, air, and suction capabilities including:
 - (i) Two separate oxygen outlets in each infant station;
 - (ii) Two medical air outlets in each infant station;
- (iii) One mechanism for blending oxygen and medical air for each infant station;
- (iv) Sufficient numbers of oxygen analyzers available to continuously monitor oxygen;
- (v) A means for warming, humidifying, and monitoring temperature of oxygen mixtures on a continuous basis; and
- (vi) Two electrical-mechanical or pneumatic suctions in each infant station with others available if needed.
- (d) All equipment and supplies for infant resuscitation available and present within the neonatal intensive care nursery service area;
- (e) Continuous ventilatory support equipment available at all times;
- (f) Equipment for continuous monitoring of respirations and heart rate in each infant station;
- (g) Equipment for continuous hemodynamic monitoring and status of oxygenation available;
- (h) Equipment for continuous monitoring of body temperature available;
- (i) Sufficient microvolumetric infant infusion pumps immediately available at all times in the neonatal intensive care nursery service area;

- (j) Laboratory, radiology, and respiratory care and pharmacy services appropriate for neonates and infants available in the hospital at all times;
- (k) Twenty-four-hour availability of an anesthesia services and a pharmacist to come to the hospital as required or requested available at all times;
- (1) Provision of a registered nurse responsible for neonatal intensive care nursery services and implementation of policies;
- (m) Provision of sufficient and adequate nursing staff in the neonatal intensive care nursery service to perform all specialized nursing skills required;
- (n) Medical responsibility for intensive care nursery services by a neonatologist member of the medical staff;
- (o) Twenty-four-hour availability of a neonatologist to come for in-house consultation as required or requested;
- (p) A designated physician in the hospital available at all times to the neonatal intensive care nursery service with experience or skills including:
 - (i) Neonatal and infant resuscitation; and
- (ii) Ventilator management including chest tube placement.
- (q) Standing orders, protocols, patient discharge/ transfer plans and evaluation of neonatal intensive care nursery services meeting requirements under subsection (2) of this section and WAC 248-18-221 (6)(c);
- (r) Provision for referral or arranging for social work services as required; and
- (s) Provision for patient access to other services as required.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-230, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 89-22-106 (Order 010), § 248-18-224, filed 11/1/89, effective 12/2/89.]

WAC 246-318-240 Critical care service. Hospitals providing any critical care service shall provide:

- (1) An electrocardiographic monitor with an oscilloscope, a rate meter connected to a recorder, and an audio alarm system for each bed used for critical care;
- (2) Equipment and supplies in the critical care area or available in the hospital for use in the area appropriate to meet patient needs consistent with the nature and scope of critical care services defined by the hospital including:
 - (a) Twelve lead electrocardiographs;
 - (b) Tracheostomy set;
 - (c) Infusion pumps dedicated for use in critical care;
 - (d) Gastric suction equipment;
- (e) External and internal pacemaker insertion equipment and supplies;
- (3) Emergency medical supplies and equipment available to critical care within sixty seconds including:
- (a) Direct current defibrillator with synchronization capabilities;
 - (b) Intubation supplies and equipment;
- (c) Emergency cart with appropriate drugs and supplies;
 - (d) Chest tube insertion supplies;

- (e) Intravenous, intra-arterial, and central venous access supplies consistent with the nature and scope of critical care services offered;
- (4) Adequate, accessible, available means of administering oxygen, medical air, and continuous ventilatory support and providing suction;
- (5) Electrical capacity and outlets sufficient to accommodate electrical equipment at each bedside, with emergency power for lighting and critical care equipment;
 - (6) A communication system within the area for:
- (a) Patients to summon assistance for routine patient care; and
 - (b) Summoning appropriate personnel in emergencies;
 - (7) Movable beds with:
 - (a) A secure braking and locking device;
- (b) Easily adjustable positioning to meet patient needs;
- (c) The head of the bed easily accessible for resuscitation and/or other emergency procedures; and
 - (d) Removable head board or equivalent;
- (8) Written policies and procedures established and implemented pertinent to patient care within the critical care service area which are:
 - (a) Made known to hospital and medical staff; and
- (b) Readily available to all persons functioning within the area:
- (9) Medical oversight or direction in the critical care service area by a physician member of the medical staff with functions and responsibilities delineated by the hospital governing body and medical staff bylaws;
- (10) Description of all physicians' privileges and responsibilities for patients within the critical care unit;
- (11) Written hospital policies and procedures established and implemented including:
- (a) Criteria and priorities for admission, discharge, and transfer of patients;
- (b) A requirement for a physician's examination of each patient immediately prior to admission to the critical care unit or as soon as possible thereafter as defined by the hospital;
 - (c) Delivery of patient care minimally including:
 - (i) The use of specialized medical equipment;
- (ii) The performance of specific patient care procedures; and
- (iii) The delineation of who may perform which procedures;
- (d) Protocols to guide the actions of personnel when a medical emergency is imminent or arises and a physician is not present;
- (e) Visitor and traffic control in the critical care area; and
- (f) The role of the critical care area in the hospital disaster plans;
- (12) At least two nursing personnel skilled and trained in care of critical care patients on duty in the hospital at all times and:
- (a) Immediately available to provide care to patients admitted to the critical care area;
- (b) Trained and current in cardiopulmonary resuscitation;

- (c) Including at least one registered nurse with:
- (i) Training in the safe and effective use of the specialized equipment and procedures employed in the particular area; and
- (ii) Successful completion of an advanced cardiac life support training program as defined and approved by the hospital or certified by the American Heart Association unless other personnel certified in advanced life support by the American Heart Association are immediately available to critical care.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-240, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 90-24-044 (Order 115), § 248-318-240, filed 11/30/90, effective 12/31/90.]

WAC 246-318-250 Renal dialysis services. Hospitals providing renal dialysis services shall:

- (1) Reuse dialyzers only when the cleaning and sterilization procedure meets guidelines under Association for Advancement of Medical Instrumentation (AAMI), July 1986, "Recommended Practices for Re-use of Hemodialyzers";
 - (2) Provide adequate space for:
- (a) Equipment and supplies necessary for the dialyzing patient;
- (b) Preparation of materials necessary for dialysis; and
 - (c) Cleaning and disinfecting equipment;
- (3) Provide water treatment, if necessary to ensure water quality, meeting recommendations under AAMI guidelines under subsection (1) of this section;
- (4) Test water for bacterial contamination monthly and chemical purity as required under AAMI, July 1986:
- (5) Test dialysis machine for bacterial contamination monthly or demonstrate a quality assurance program establishing effectiveness of disinfection methods and intervals;
- (6) Take appropriate measures to prevent contamination, including backflow prevention under chapter 248–54 WAC, between:
 - (a) Dialysis machines;
 - (b) Dialysis machines and potable water supply; and
 - (c) Dialysis machine, drain line, and sewer;
- (7) Provide for the availability of any special dialyzing solutions required by a patient:
- (8) Meet requirements under WAC 248-18-001 through 248-18-445.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-250, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 90-24-044 (Order 115), § 248-318-250, filed 11/30/90, effective 12/31/90.]

- WAC 246-318-260 Long-term care services. (1) Hospitals providing inpatient long-term care services shall:
 - (a) Meet requirements under WAC 248-18-190;
- (b) Require an assessment of each patient by a registered nurse upon admission to determine immediate care needs;
- (c) Require documentation of the initial plan of care in the patient's medical record;

- (d) Make the plan of care accessible to direct caregivers who have a need to know in order to provide actual health care services to the patient;
- (e) Establish a plan of care individualized to the needs of each patient and:
- (i) Developed by those disciplines involved in a patient's care;
- (ii) Implemented in conjunction with a registered nurse responsible for total care of the patient for the duration of hospitalization in a long-term care service unit or area; and
 - (iii) Maintained in a confidential manner;
- (f) Require a physician's order for use of any physical restraint restricting freedom of movement or position change, including the specific reason, type, and location of restraint, and:
- (i) Establish and follow a policy on release of patients from physical restraints for specified intervals and monitoring of patients in restraints;
- (ii) Require documentation in a patient's medical record of patient's restraint release time intervals;
- (iii) Document reason for use of any restraint on a patient in the patient care plan.
- (2) Hospitals providing long-term care shall establish written policies and procedures specifying:
 - (a) Rights of patients including:
- (i) Informing each patient of individual rights at the time of admission;
- (ii) Documenting evidence of informing a legally delegated person about a patient's rights when a patient is unable to receive and understand the information;
 - (b) A mechanism to:
 - (i) Identify social and emotional needs of the patients;
- (ii) Refer patients in need of social services to appropriate social agencies.
- (3) Hospitals with inpatient long-term care services shall provide:
- (a) An activities program designed to encourage each long-term care patient to maintain or attain normal activity and achieve an optimal level of independence;
 - (b) A community dining area;
- (c) Handrails on both sides of all patient access corridors;
- (d) Patient bathrooms and toilets arranged to accommodate wheelchair patients;
- (e) A shower stall accommodating a shower chair on the same level and convenient to patient rooms.
- (4) Hospitals providing long-term care services and permitting pets shall:
- (a) Require and provide for humane care and maintenance of pets under conditions prohibiting animals, except for fish in an aquarium, in rooms or areas for:
 - (i) Food storage and preparation;
- (ii) Group dining areas during the times food is served and consumed;
- (iii) Cleaning and storage of cooking and eating utensils;
 - (iv) Linen storage or laundry;
 - (v) Drug or sterile supply storage; and
- (vi) Patient bedrooms if the condition of a patient in the room contraindicates the presence of the animal;

- (b) Permit seeing eye, hearing, and assistance dogs as needed:
- (c) Provide reasonable opportunity for a patient to have regular contact with animals, if the patient desires;
- (d) Consider preferences of the long-term care patients through a long-term care resident council, poll, or other means;
- (e) Ensure the presence of animals does not compromise the rights, preferences, and medical requirements of individual patients;
- (f) Permit animals such as dogs, cats, fish, gerbils, hamsters, guinea pigs, and birds;
- (g) Require veterinarian certification of psittacine birds certified free of psittacosis or other diseases and meeting United States Department of Agriculture (USDA) quarantine procedures;
- (h) Require regularly scheduled veterinarian examinations and appropriate immunizations for animals living on the premises, with records retained in the hospital;
- (i) Keep animals living on the premises clean and free of external parasites such as fleas and ticks.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-260, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 90-24-044 (Order 115), § 248-318-260, filed 11/30/90, effective 12/31/90.]

WAC 246-318-270 Alcoholism and/or substance abuse unit. (1) Definitions specific to WAC 248-18-235 and 248-18-532:

- (a) "Alcoholism" means an illness characterized by lack of control as to the consumption of alcoholic beverages, or the consumption of alcoholic beverages to the extent an individual's health is substantially impaired or endangered, or his or her social or economic function is substantially disrupted.
- (b) "Alcoholism counselor" means an individual with adequate education, experience, and knowledge regarding the nature and treatment of alcoholism, who is knowledgeable about community resources providing services alcoholics may need, and who knows and understands the principles and techniques of alcoholism counseling with minimal requirements to include:
- (i) No history of alcohol or other drug misuse for a period of at least two years immediately prior to time of employment as an alcoholism counselor with no misuse of alcohol or other drugs while employed as an alcoholism counselor;
 - (ii) A high school diploma or equivalent:
- (iii) Satisfactory completion of at least twelve quarter or eight semester credits from a college or university, including at least six quarter credits or four semester credits in specialized alcoholism courses exclusive of field experience credits.
- (c) "Detoxification" means care or treatment of an intoxicated person during a period in which the individual recovers from the effects of intoxication.
- (i) "Intoxication" means acute alcohol poisoning or temporary impairment of an individual's mental or physical functioning caused by alcohol in the body.

- (ii) "Acute detoxification" means a method of withdrawing a patient from alcohol where nursing services are available and medications are routinely administered to facilitate the patient's withdrawal from alcohol.
- (d) "Family" means individuals important to and designated by a patient who need not be relatives.
- (e) "Individualized treatment plan" means a written statement of care to be provided for a patient based upon assessment of his or her strengths and physical and psychosocial problems. When appropriate, the statement shall be developed with participation of the patient.
- (f) "Multidisciplinary treatment team" means a group comprised of individuals from the various treatment disciplines and clinical services who assess, plan, implement, and evaluate treatment for patients under care.
- (2) Rules and regulations in chapter 248–18 WAC shall apply with addition of the following:
- (a) There shall be a room adequate for counseling and social activities of patients.
- (b) Adequate provision for space and privacy shall be made for interviewing, group and individual counseling, and physical examinations.
- (c) Policies and procedures shall include and address, as appropriate:
- (i) Development, implementation, and review of the individualized treatment plan, including the participation of the multidisciplinary treatment team, the patient, and the family, as appropriate.
 - (ii) Patient rights to include:
- (A) Treatment and care of patients in a manner promoting dignity and self-respect;
- (B) Protection from invasion of privacy: *Provided*, That reasonable means may be used to detect or prevent contraband from being possessed or used on the premises;
- (C) Confidential treatment of clinical and personal information in communications with individuals not associated with the plan of treatment;
- (D) A means of implementing federal requirements related to confidentiality of records, Title 42, Code of Federal Regulations, Part 2, Federal Register, July 1, 1975;
- (E) Provision of reasonable opportunity to practice religion of choice insofar as such religious practice does not infringe upon rights and treatment of others or the treatment program: *Provided*, That the patient also has the right to refuse participation in any religious practice.
- (F) Communication with significant others in emergency situations.
- (G) Freedom from physical abuse or other forms of abuse against patient's will, including being deprived of food, clothes, or other basic necessities.
- (iii) Patient work assignments related to treatment program, if applicable.
 - (d) Personnel, staff, other services.
- (i) Clinical responsibility for alcoholism and substance abuse units shall be assigned to an individual having demonstrated experience in this type of treatment and care. This individual shall be designated and function as specified by the governing body.

- (ii) There shall be on staff at least one alcoholism counselor and such additional alcoholism counselors as necessary to provide alcoholism counseling services needed by patients.
- (iii) There shall be a licensed nurse on duty on the unit whenever acute detoxification is taking place on the unit.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–270, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030 and 43.20.050. 84–22–003 (Order 277), § 248–18–235, filed 10/26/84.]

WAC 246-318-280 Psychiatric units and services. (1) Definitions.

In addition to definitions in WAC 248-18-001, the following words and phrases are defined for the purpose of this section and WAC 248-18-536 unless the context clearly indicates otherwise.

- (a) "Acutely mentally ill" means a condition limited to a short-term severe crisis episode of:
- (i) A mental disorder, meaning any organic, mental, or emotional condition having substantial adverse effects on an individual's cognitive or volitional functions;
 - (ii) Suicidal or self-destructive behavior;
 - (iii) Actual or threatened behavior harmful to others;
- (iv) Behavior which caused substantial damage to property; or
- (v) Being gravely disabled, meaning a condition in which a person, as a result of a mental disorder:
- (A) Is in danger of serious physical harm resulting from a failure to provide for his or her essential human needs of health and safety; or
- (B) Manifests severe deterioration in routine functioning evidenced by repeated and escalating loss of cognitive or volitional control over his or her actions and is not receiving care essential for his or her health or safety.
- (b) "Child" or "children" means children and adolescents seventeen years of age or younger.
- (c) "Child psychiatrist" means a physician, board-certified or board-eligible in child psychiatry under:
- (i) The directory of residency training programs accredited by the accreditation council for graduate medical education, American Medical Association, 1981–82; or
- (ii) The American Osteopathic Association Yearbook and Directory, American Osteopathic Board of Neurology and Psychiatry, 1981–82.
- (d) "Child mental health specialist" means a mental health professional with:
- (i) A minimum of one hundred actual, rather than semester, hours of specialized training devoted to a study of child development and the treatment of children; and
- (ii) The equivalent of one year full-time experience in the treatment of children under supervision of a child mental health specialist.
- (e) "Consultation" means review and recommendations regarding patient care and treatment programs.
- (f) "Family" means individuals important to and designated by a patient, who need not be relatives.

- (g) "Individualized treatment plan" means a written statement of care planned for a patient based upon assessment of the patient's developmental, biological, psychological, and social strengths and problems, and including:
 - (i) Treatment goals, with time frames stipulated;
 - (ii) Specific services utilized;
- (iii) Designation of individual responsible for specific service provided;
 - (iv) Discharge criteria with estimated timeframes; and
- (v) Participation of the patient and the patient's designee as appropriate.
- (h) "Least restrictive alternative" means the setting, environment, or service in which the individual functions at maximum independence.
 - (i) "Mental health professional" or "MHP" means:
 - (i) A psychiatrist;
- (ii) A psychiatric nurse, social worker, physician, or psychologist; or
- (iii) A person with at least a masters degree in behavioral sciences, nursing science, or related field from an accredited college or university and two years experience in direct treatment of mentally ill individuals under the supervision of a mental health professional.
- (j) "Multidisciplinary treatment team" means a group comprised of individuals from various disciplines and clinical services who assess, plan, implement, and evaluate treatment for patients.
- (k) "Psychiatric nurse" means a registered nurse with:
- (i) A bachelors degree from an accredited college or university and at least two years experience in direct treatment of mentally ill or emotionally disturbed persons with such experience gained under supervision of a psychiatrist or psychiatric nurse; or
- (ii) Three years experience in the direct treatment of mentally ill or emotionally disturbed persons with such experience gained under the supervision of a psychiatrist or psychiatric nurse.
- (1) "Psychiatric service" means admission of patients with primary psychiatric diagnoses for treatment pertinent to the psychiatric diagnosis in any available bed in the hospital whether or not the hospital maintains a psychiatric unit.
- (m) "Psychiatric unit" means a nursing unit specifically reserved for the care of individuals with primary psychiatric diagnoses.
 - (n) "Recreational therapist" means an individual:
- (i) With a bachelors degree including a major or option in therapeutic recreation or recreation for the ill and handicapped; and
- (ii) Preferably certified or certification-eligible under Certification Standards for Therapeutic Recreation Personnel, June 1, 1988, National Council for Therapeutic Recreation Certification, 49 South Main Street, Suite 005, Spring Valley, New York 10977.
- (2) Hospitals with psychiatric units shall provide a therapeutic environment to maintain safe, secure, adequate care of acutely mentally ill persons including:
 - (a) Access to at least one seclusion room;
- (b) Provisions for close observation of patients including provision of security windows or maximum security

- windows and relites appropriate to the area and program;
 - (c) Adequate space suitably equipped including:
 - (i) A day room on the unit;
- (ii) Dining and therapeutic program activities either on the unit or elsewhere in the hospital appropriate to meet each patient's needs;
- (iii) Space for physical and recreational activities of patients on the hospital premises; and
- (iv) One area permitted to accommodate functions in (c)(i), (ii), and (iii) of this subsection if scheduled appropriately.
- (d) An examination or treatment room available within the hospital;
- (e) Space and privacy for interviewing, group and individual counseling, and patient and family visiting; and
- (f) Separate patient sleeping rooms for children and adults.
 - (3) Hospitals providing a psychiatric unit shall:
- (a) Provide adequate staff to implement individualized treatment plans;
- (b) Assign and designate responsibility for the psychiatric unit programming to a mental health professional;
- (c) Designate a psychiatrist with medical staff privileges, available for ongoing psychiatric unit consultation;
- (d) Have a physician and mental health professional available for consultation and communication with each patient and the unit staff on a twenty—four hour per day, seven day a week basis;
- (e) Employ a full-time psychiatric nurse responsible for nursing care;
- (f) Designate staff or contract with persons or agencies responsible for:
- (i) Provision of social work services with consultations by a social worker experienced in working with mentally ill patients;
- (ii) Provision of occupational therapy services with the ongoing input of an occupational therapist experienced in working with mentally ill patients;
- (iii) Provision of recreational therapy services with the ongoing input of a recreational therapist experienced in working with mentally ill patients; and
- (iv) Providing access to psychological evaluation by or under direction of a psychologist.
- (g) Provide documented staff training relating to the needs of psychiatric patients for all psychiatric unit personnel including:
 - (i) The utilization of least restrictive alternatives;
 - (ii) Methods of patient care;
- (iii) Managing assaultive and self-destructive behavior;
- (iv) Patient rights under chapters 71.05 and 71.34 RCW;
- (v) The special needs of children, minorities, the elderly, and handicapped when appropriate.
- (h) For hospitals providing a child or adolescent psychiatric unit:
- (i) Assign and designate responsibility for the child and adolescent psychiatric unit programming to a child mental health specialist;

- (ii) Designate a child psychiatrist with medical staff privileges available for ongoing input and consultation to the child and adolescent psychiatric unit;
- (iii) Have a physician and child mental health specialist available for consultation and communication with each patient and unit staff on a twenty-four hour per day, seven days per week basis;
- (iv) Employ a full-time psychiatric nurse meeting requirements of a child mental health specialist under subsection (1)(d) of this section responsible for nursing care;
- (v) Designate staff or contract with persons or agencies responsible for:
- (A) Provision of social work services with consultation and ongoing input by a social worker experienced in working with mentally ill children and adolescents;
- (B) Provision of occupational and recreational therapy services as required under (f)(ii) and (iii) of this subsection;
- (C) Provision of access to psychological evaluation as required under (f)(iv) of this subsection;
- (D) Provision of documented staff training as required under (g) (i) through (v) of this subsection; and
 - (E) Provision of educational services.
- (4) Hospitals providing psychiatric units shall establish and implement written policies and procedures including:
- (a) Provision or arrangement for the care and treatment of acutely mentally ill patients;
- (b) Informing patients of their rights as required under chapters 71.05 and 71.34 RCW;
 - (c) Posting of patient rights in prominent locations;
- (d) Development of an initial individualized treatment plan for each patient within twenty-four hours of admission;
- (e) Continued development of the individualized treatment plan within seventy-two hours of admission, excluding holidays, by a multidisciplinary treatment team, the patient, family, and other agencies as appropriate;
- (f) Provision of or arrangement for appropriate services including:
 - (i) Psychological evaluation and services;
 - (ii) Social work services;
 - (iii) Occupational therapy services;
 - (iv) Recreational therapy services; and
 - (v) Other specialized services as appropriate;
- (g) Completion of a physical examination and history by a member of the medical staff and an evaluation by a mental health professional within twenty—four hours of admission with consultation of a psychiatrist as indicated;
- (h) Admission, retention and transfer criteria, based upon health and safety needs of patients, including a referral and transfer mechanism for persons in need of care and not meeting the admission criteria;
- (i) Continuity of care, coordination and integration of services, including discharge planning consistent with WAC 248-18-445;

- (j) Prohibiting use of patients to perform basic maintenance of the hospital and equipment, housekeeping, or food service except when tasks are:
- (i) Included in and appropriate to the individualized treatment plan; and
 - (ii) Performed under direct supervision.
- (k) Appropriate response to assaultive, self-destructive, or out-of-control behavior including the use of seclusion and restraints and subject to the following conditions:
- (i) Use of seclusion and restraints only to the extent and duration necessary to ensure the safety of patients, staff, and property;
- (ii) Infliction of physical pain for punitive purposes is prohibited, regardless of whether or not objective damage occurs;
- (iii) All assaultive incidents documented in the medical record;
- (iv) Staff observation of any patients in restraint or seclusion at least every fifteen minutes with:
 - (A) Interventions as indicated and required; and
- (B) Observations and interventions recorded in the medical record;
- (v) Notification of and authorization by a physician within one hour for emergency use of patient restraint or seclusion and including:
- (A) Physician examination of the patient and renewal of physician order for every twenty-four continuous hours of restraint and seclusion; and
- (B) Patient evaluation by a mental health professional or registered nurse when secluded or restrained more than two continuous hours with repeat evaluation at least one time every eight hours thereafter.
- (1) Notification of the family and other agencies as appropriate as soon as possible, in event of:
 - (i) Serious injury or physical illness of the patient;
 - (ii) Death of the patient; or
 - (iii) Disappearance of the patient.
- (m) For hospitals providing child or adolescent psychiatric units:
- (i) Requirements under (a) through (l) of this subsection except:
- (A) Substitute for (g) of this subsection completion of a physical examination and history by a member of the medical staff and an evaluation by a child mental health specialist within twenty–four hours of admission with consultation by a child psychiatrist as indicated; and
- (B) In (k)(v)(B) of this subsection, require patient evaluation by a child mental health specialist every two hours when a child is secluded or restrained.
- (ii) Evaluation by a child mental health specialist within twenty-four hours of admission including consultation with a child psychiatrist as indicated;
- (iii) Requirement for designated staff to make and document a determination of the hospital's ability to safely care for each child; and
- (iv) Coordination with appropriate educational agencies, as appropriate.
- (5) Hospitals with psychiatric units or psychiatric services shall maintain a medical records system required

- under WAC 248-18-440 and require diagnoses, abbreviations, and terminology consistent with the "American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders," III R edition, 1987, and "International Classification of Diseases," 9th edition, 1989.
- (6) Hospitals with psychiatric units or services shall establish and implement policies and procedures to protect patient confidentiality and release of records and information consistent with requirements under chapters 71.05 and 71.34 RCW.
- (7) Hospitals providing any inpatient psychiatric service shall establish and implement written policies and procedures including:
- (a) Provision of a therapeutic environment to maintain safe, secure, adequate care of acutely mentally ill patients;
- (b) Provision of facilities appropriate to the scope of the psychiatric service;
- (c) Designation of responsibility for psychiatric services programming to a mental health professional;
- (d) Provision for close observation of patients with a security room available;
- (e) Designation of a psychiatrist with medical staff privileges available for consultation;
- (f) A physician and mental health professional available on staff or by contract for consultation and communication with the patient and the hospital staff on a twenty-four hour per day, seven day a week basis;
- (g) Designation of a staff person responsible for developing a plan for arranging needed special services as identified in the individualized treatment plan for each patient;
- (h) Employment of a registered nurse with experience and/or specialized education in psychiatric nursing responsible for nursing care twenty-four hours a day;
- (i) Designation of a staff person responsible for arranging for social work services;
- (j) Provision for transfer to a hospital with a psychiatric unit or appropriate psychiatric services within twenty-four hours when the hospital is unable to establish and implement procedures required under (a) through (i) of this subsection.
- (k) Designating staff responsible for documented training relating to the needs of psychiatric patients for all personnel responsible for care of psychiatric patients including:
- (i) The availability and utilization of the least restrictive alternatives;
 - (ii) Methods of patient care;
- (iii) Managing assaultive and self-destructive behavior;
- (iv) The special needs of children, minorities, the elderly, and handicapped as appropriate;
- (v) Patient rights under chapters 71.05 and 71.34 RCW.
- (1) Implementation of requirements in subsection (4) of this section except requirement for recreational or occupational therapy services under subsection (4)(f)(iii) and (iv) of this section;
- (m) For hospitals providing any child or adolescent psychiatric services, with or without a psychiatric unit:

- (i) All requirements under (a) through (l) of this subsection apply;
- (ii) Establish and implement policy and procedures for age and behavior specific criteria in determining appropriate room assignment.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–280, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 90–23–012 (Order 113), § 248–18–240, filed 11/13/90, effective 12/14/90. Statutory Authority: RCW 70.41.030 and 43.20.050. 83–19–058 (Order 269), § 248–18–240, filed 9/20/83. Statutory Authority: RCW 43.20.050 and chapter 70.41 RCW. 81–22–014 (Order 216), § 248–18–240, filed 10/23/81; Order 119, § 248–18–240, filed 5/23/75; Regulation 18.240, effective 3/11/60.]

- WAC 246-318-290 Surgery—Operating rooms and areas—Special procedure rooms—Surgical treatment or diagnostic areas. (1) Operating rooms, facilities, personnel, equipment, policies and procedures shall be appropriate to the scope of surgical services offered in each hospital.
 - (2) Environment facilities equipment.
- (a) Operating room facilities and services, when provided, shall be located in a segregated area or areas of the hospital with access limited by hospital policy and procedures.
- (b) Operating rooms and operating room service areas and facilities shall be properly equipped, easily cleanable, and of adequate size to accommodate the equipment and personnel required for surgical procedures performed.
 - (i) Each operating room shall have available:
 - (A) Operating light and adequate general lighting;
 - (B) Operating table, stretcher, or equivalent;
 - (C) Oxygen;
 - (D) Suction;
 - (E) Appropriate electrical outlets;
 - (F) X-ray film illuminator;
 - (G) Cardiac monitor;
 - (H) Anesthesia equipment and supplies;
- (I) Emergency signaling device which automatically registers at a location from or through which additional assistance is always available;
 - (J) Source of emergency power; and
 - (K) Emergency lighting.
- (ii) Each hospital shall provide appropriately maintained emergency equipment, supplies, and services available within sixty seconds and appropriate for the care of adults, children, and infants minimally to include:
 - (A) Ventilatory equipment, including airways;
 - (B) Cardiac defibrillator;
 - (C) Cardiac monitor;
 - (D) Laryngoscopes and endotrachial tubes;
 - (E) Suctions; and
- (F) Emergency drugs and fluids including schedules of pediatric dosages.
- (c) There shall be adequate operating room scrub sinks with provisions for a cleansing agent located adjacent to operating rooms and providing hot and cold water and equipped with knee, foot, elbow, or automatic faucet controls.

- (d) Separate and adequate refrigerated storage facilities with appropriate alarms shall be provided for blood if blood is stored in the operating room area.
- (e) There shall be a dressing area with appropriate locker storage available for persons entering operating rooms.
 - (f) Toilet facilities shall be available.
- (g) Adequate types and quantities of surgical instruments, equipment, and supplies for procedures performed shall be provided and maintained in a sanitary and safe condition.
- (h) There shall be adequate storage within the operating room service area for clean and sterile supplies and equipment.
- (i) A designated area shall be provided for collection and cleaning of soiled instruments and equipment.
- (j) There shall be adequate, cleanable facilities for safe and appropriate waste collection and disposal.
- (k) Housekeeping facilities shall be located within operating room service areas. These may be included in a soiled utility room equipped with a clinic service sink or service sink.
- (1) There shall be filtered clean air in each operating room. A positive pressure ventilation gradient to adjoining corridors shall be maintained in operating rooms.
- (m) Operating rooms shall be equipped with a room temperature control device or system capable of maintaining appropriate patient body temperature.
 - (3) Policies procedures responsibility.
- (a) The organization plan of the hospital shall identify lines of authority, responsibility, and accountability within all operating room areas and areas where surgical procedures are performed or anesthesia administered.
- (i) There shall be a physician designated and responsible for implementation of hospital policy related to medical staff in operating rooms and operating room service areas.
- (ii) A designated registered nurse shall supervise personnel as specified in hospital policy in operating rooms and operating room service areas and shall be responsible for:
- (A) Development and implementation of operating room and operating room service staffing plans to maintain adequate and safe patient care.
- (B) Provision for orientation and ongoing training of personnel providing services within operating rooms and operating room service areas.
- (C) Defining nursing responsibility between the time of patient entry into and exit from operating rooms and operating room service areas.
- (b) Written policies and procedures shall be approved in writing by appropriate representatives of administration, medical staff, and nursing services.
- (i) Information, policies and procedures available to nursing and scheduling staff shall include:
- (A) A current roster of medical staff including delineated surgical privileges as granted by the governing body.
- (B) Policies and delineated privileges, responsibilities, and accountability of others approved by medical staff and governing body to provide services in operating

- rooms including, but not limited to, dentists, oral surgeons, and podiatrists.
- (C) Requirements for surgical and technical-professional assistants, including current licensure and/or other qualifications and any limitations related to patient care activities within the operating room or operating room service areas including, but not limited to, surgical technicians, other technicians, nurses, or technicians who are not hospital personnel or students.
- (ii) There shall be a policy and procedures for obtaining surgical assistants.
- (iii) There shall be policies and procedures specifying responsibility to document all aspects of patient care in operating rooms and operating room service areas.
- (iv) Written infection control policies approved by the infection control or equivalent interdisciplinary group shall delineate responsibility in training and orientation of operating room and operating room service area personnel and others. Infection control policies and procedures shall specifically address:
 - (A) Surgical attire;
 - (B) Appropriate surgical scrub procedures;
- (C) Housekeeping functions specific to operating room and operating room service areas before, between, and after cases:
- (D) Cleaning, disinfecting, sanitizing, packaging, sterilizing, and storage of equipment and supplies;
 - (E) Disposal of wastes;
- (F) Nonhospital and hospital—owned equipment that may be brought into the operating room or operating room service areas including requirements for cleaning and sterilization including, but not limited to, tools for repairing equipment and physician—owned instruments.
- (G) People who may enter operating room areas including those who are not hospital personnel, such as repairmen and vendors.
- (v) Written policies and procedures related to patient safety or protection shall address servicing, maintenance, and safety checks of electrical-electronic equipment and other patient care equipment including nonhospital—owned equipment.
- (vi) Policies and procedures shall address and define responsibility for continuous patient care and documentation when a patient is transferred from one place to another in the course of performing a surgical or invasive procedure.
- (4) Preoperative patient care shall be addressed in written hospital policies which shall define requirements for patient care during the preoperative period to include:
- (a) A current patient history and report of physical examination by a practitioner, authorized by medical staff rule, included in the patient medical record prior to surgery. "Current," as used in this subsection, shall be defined by hospital policy.
- (b) Documented assessment of patient needs for care including, but not limited to, allergies, fears, anxieties, changes in condition, vital signs.
- (c) Written consent for procedure or surgery and anesthesia available in the medical record.
 - (d) Identification of patients by a secured name band.

- (e) Test results available prior to surgery or procedure.
- (5) Short stay or short term or ambulatory or one—day surgery services or special procedures, regardless of where performed, shall function according to written policies and procedures approved by representatives of hospital administration, medical staff, and nursing services and include:
- (a) Patient identification system, patient consent, and preoperative patient assessment requirements.
- (b) Provisions for appropriate monitoring or observation of patients undergoing procedures by at least one qualified person in addition to the medical staff authorized practitioner performing the procedure.
- (c) Written approved infection control and equipment safety policies as specified in WAC 248-18-251 (3)(b).
- (d) Emergency equipment as required for all operating rooms, available within sixty seconds as specified in WAC 248-18-251 (2)(b)(ii).
- (e) Documentation of patient assessment prior to, during, and post procedure.
- (f) Teaching protocols for post procedure period including what signs and symptoms the patient should report, who to contact, limitations on activities or diet, medication control, driving, operation of mechanical equipment, and instructions for follow-up.
 - (g) Patient evaluation prior to discharge.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–290, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 85–23–017 (Order 2302), § 248–18–251, filed 11/13/85.]

- WAC 246-318-300 Anesthesia services. (1) Anesthesia facilities, equipment, personnel, staff, policies and procedures shall be appropriate to the scope of surgical, obstetrical, or other care offered in each hospital.
- (2) There shall be a designated physician member of medical staff responsible for anesthesia services and for establishing general policies for administration of anesthesia to patients throughout the hospital.
- (3) Written policies and procedures shall be established to provide safety for all anesthetized patients to include:
- (a) Provision for appropriate monitoring and attendance of all anesthetized patients.
- (b) Qualifications and responsibilities of persons performing anesthesia services and care in compliance with applicable federal and state laws and rules.
 - (c) Evaluation of each patient prior to anesthesia.
- (d) Pertinent information recorded in the medical record at the time of the preoperative anesthesia evaluation.
- (e) Criteria or protocols for assessment of all patients by qualified persons prior to discharge from any post-anesthesia recovery area or the hospital.
- (f) Precautions or procedures for safe administration of anesthetizing agents and other drugs consistent with hospital policy approved by the appropriate medical staff committee in accordance with WAC 248-18-190 (1)(n) and 248-18-190 (2)(f).

- (g) Preparation, administration, and documentation of intravenous solutions, medications, and admixtures consistent with WAC 248-18-335 and 248-18-336.
- (4) All information specific to condition and treatment of the patient occurring during anesthesia induction, anesthesia maintenance, or emergence from anesthesia shall be documented and retained in the medical record of the patient.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-300, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 85-23-017 (Order 2302), § 248-18-253, filed 11/13/85.]

WAC 246-318-310 Post-anesthesia recovery areas.

- (1) Post-anesthesia facilities, equipment, personnel, staff, policies and procedures shall be appropriate to the scope of surgical, obstetrical, or other care offered in each hospital.
 - (2) Environment facilities.
- (a) A handwashing sink, soap dispenser, and towel dispenser shall be available within each post-anesthesia recovery room or area.
- (b) There shall be provisions for visual privacy for patients.
- (c) Suction and oxygen shall be available for each patient.
- (d) Emergency equipment and supplies shall be appropriately maintained and available within sixty seconds, as specified in WAC 248-18-251 (2)(b)(ii).
- (e) Adequate, easily cleanable storage facilities shall be provided.
 - (f) There shall be a soiled utility room available.
- (g) An emergency signalling device registering at a location from or through which additional assistance is always available shall be available within recovery rooms or areas.
 - (3) Policies procedures responsibility.
- (a) The organization plan of the hospital shall identify lines of authority, responsibility, and accountability within post-anesthesia recovery rooms or areas.
- (i) There shall be a physician designated and responsible for implementation of hospital policy related to medical staff in post—anesthesia recovery rooms and areas. Policy shall specify amount and degree of physician availability to post—anesthesia recovery areas at all times when patients are present.
- (ii) A designated registered nurse shall supervise personnel as specified in hospital policy in post—anesthesia recovery rooms and areas and shall be responsible for:
- (A) Developing and implementing post-anesthesia recovery service staffing plans to maintain adequate and safe patient care, and
- (B) Providing for orientation and ongoing training of personnel providing services within post-anesthesia recovery rooms or areas.
- (b) There shall be criteria or protocols for assessment of all patients by qualified persons prior to discharge or release from any post-anesthesia recovery room or area.
- (c) There shall be policies and procedures regarding management of infected or infectious cases, approved by the infection control committee.

- (4) Nursing and other staff providing patient care in post—anesthesia recovery areas shall have documented orientation and demonstrated appropriate skills related to life support activities or functions.
- (5) There shall be written orders authenticated by a physician for all drugs, intravenous solutions, blood, and medical treatments. Standing medical orders or protocols, when used, shall be in the patient medical record and authenticated by a physician.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-310, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 85-23-017 (Order 2302), § 248-18-256, filed 11/13/85.]

- WAC 246-318-320 Processing and sterilizing services. (1) Hospitals shall make adequate provisions for proper cleaning, disinfection, and sterilization of supplies, equipment, utensils, and solutions.
- (2) Processing and sterilizing services and areas shall have adequate space and equipment for sorting, processing, and storage.
- (a) Separation between soiled and clean items shall be maintained during sorting, processing, transporting, and storage.
- (b) Positive air pressure shall be maintained in clean areas in relation to adjacent areas.
- (c) Negative air flow shall be maintained in soiled areas.
- (d) Equipment including sterilizers of the proper type for adequate sterilization shall be provided and maintained in a satisfactory and safe condition.
- (e) If ethylene oxide sterilizers are used, mechanical aerators shall be provided and maintained in a safe and satisfactory condition.
- (3) Processing and sterilizing services shall be adequately staffed with trained personnel:
- (a) Orientation and inservice, including infection control and safe practices, shall be provided.
- (b) Written policies and procedures shall specify scheduled activities and routines of personnel.
- (4) There shall be written policies and procedures, approved by the infection control committee or an equivalent interdisciplinary group, for the activities performed in all processing and sterilizing areas in the hospital addressing:
- (a) Collecting, receiving, decontaminating, packaging, sterilizing, and distributing of items;
 - (b) Aerating of items exposed to ethylene oxide;
- (c) A recognized method of checking sterilizer performance by mechanical monitoring of time, temperature, and pressure as well as biological and chemical testing;
- (d) Establishment of shelf life determined by packaging material and storage environment;
- (e) Recall, disposal, and reprocessing of outdated, improperly sterilized, and limited-use items;
- (f) Maintaining clean areas free of external shipping containers.
- (5) There shall be written policies and procedures addressing emergency collection and disposition of supplies

when special warnings have been issued by a manufacturer or safety agency.

(6) Processed and sterilized items shall be maintained as specified in WAC 248-18-190 (3)(a), (b), (c), (d), and (e).

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-320, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030 and 43.20.050. 85-05-034 (Order 281), § 248-18-260, filed 2/15/85; Order 119, § 248-18-260, filed 5/23/75; Regulation 18.260, effective 3/11/60.]

WAC 246-318-330 Use of medical gases, combustible anesthetics. In rooms where combustible anesthetic (cyclopropane, divinyl ether, ethyl chloride, ethyl ether, and ethylene) agents are used, the installation, maintenance, and use of equipment and other precautions observed by personnel shall be in accordance with department approved or recommended standards.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-330, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 79-04-081 (Order 176), § 248-18-270, filed 4/2/79; Order 119, § 248-18-270, filed 5/23/75; Regulation 18.270, effective 3/11/60.]

- WAC 246-318-340 Nonflammable medical gases. (1) Nonflammable medical gases shall include but not be limited to oxygen, nitrous oxide, medical compressed air, carbon dioxide, helium, nitrogen and mixtures of such gases when used for medical purposes.
- (2) Medical gas gauges, alarms and manometers shall be tested for accuracy periodically and be conspicuously labeled "(name of gas), use no oil."
- (3) "No smoking" signs shall be posted where oxygen is being administered.
- (4) Oxygen tent canopies shall be fabricated of slow burning or noncombustible material.
- (5) Electric equipment used in an oxygen enriched environment shall be properly designed for use with oxygen and should be labeled for use with oxygen.
- (6) Procedures shall specify the safe storage and handling of medical gas containers.
- (7) Upon completion of any alteration, modification or repair of medical gas piping systems in which any line in the system is disconnected or disrupted, qualified personnel shall conduct appropriate tests, to include oxygen analysis and to assure that medical gas outlets within the disconnected or disrupted system are delivering the proper gas as shown on the outlet label. There shall be documentation that tests have occurred.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–340, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 43.20.050. 79–12–038 (Order 187), § 248–18–280, filed 11/20/79. Statutory Authority: RCW 70.41.030. 79–04–081 (Order 176), § 248–18–280, filed 4/2/79; Order 119, § 248–18–280, filed 5/23/75; Regulation 18.280, effective 3/11/60.]

WAC 246-318-350 Emergency care services. The hospital shall have a well defined system for providing emergency care services. The nature and scope of the hospital's emergency care services should be in accord with the community's needs and the hospital's capabilities.

(1990 Ed.)

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- (1) The hospital shall provide the following basic, outpatient emergency care services.
- (a) Assessment of a person's condition to determine the nature, acuity, and severity of the person's immediate medical need.

The condition of each person, who comes or is brought to the hospital for emergency medical care, shall, upon arrival, be assessed by a registered nurse, physician, or physician's assistant for the purpose of determining the nature and urgency of the person's medical need and the timing and place of the person's care and treatment.

- (b) Immediate diagnosis and treatment of any life threatening cardiac arrythmia, respiratory insufficiency or shock.
- (c) Appropriate transfer or referral of a patient who needs medical care services not provided by the hospital. Prior to transfer of an emergency patient to another health care facility, the hospital shall:
- (i) Perform the emergency procedures needed to minimize aggravation of the patient's condition during transport to the other health care facility; and
- (ii) Ascertain that the means by which the patient is to be transported to the other health care facility are suitable for the patient.
- (2) A hospital shall not be required to comply with WAC 248-18-285 (3)(h), 248-18-285 (4)(a) and (d), 248-18-285 (5)(a) and 248-18-285 (6)(a) if the hospital does not offer outpatient emergency care services regularly and only provides the outpatient emergency services required under WAC 248-18-285(1) to the occasional emergency patient who comes or is brought to the hospital by chance.
- (3) The hospital shall have, in effect, written policies and procedures which supplement and are coordinated with the hospital's basic policies and are specific to emergency care services. These policies and procedures shall be: Reviewed and revised as necessary to keep them current and, in any case, at least annually; dated and approved in writing by appropriate representatives of the hospital's administrative, medical, and nursing staffs; and made known and readily available to physicians, nurses, and other persons having a responsibility for emergency care services. Policies and procedures pertaining to emergency care services shall include the following.
- (a) Policies on the scope and extent of the emergency care services to be provided.
- (i) The hospital shall establish the conditions under which treatment is to be provided in the emergency care area, the types of procedures that are to be performed in another area of the hospital (e.g., surgery) rather than the emergency area, the conditions under which a patient is to be admitted as an inpatient, the conditions under which a patient is to be transferred to another health care facility, the conditions under which a patient is to be referred to a private physician or another health care facility, and the conditions under which arrangements should be made for a patient to return to the hospital for treatment.
- (ii) A patient shall not be transferred to another health care facility until the other health care facility

has been contacted and has consented to accept the patient.

- (iii) A record containing the following data shall be sent with an emergency patient who is transferred to another health care facility: Patient identification data, identification of the patient's illness or injury, treatment given to the patient, and an appraisal of the patient's condition upon transfer.
- (b) Policies and procedures which prescribe the course of action to be taken when the number of emergency patients, who have arrived or are expected, constitute an overload for the emergency service facilities and staff on hand.

The hospital shall establish who is to be notified when an overload of emergency patients occurs, the conditions under which arrangements are to be made for care of some emergency patients at other hospitals, the conditions under which additional physicians, nurses, and other persons are to be summoned, the methods by which necessary, additional supplies and equipment are to be obtained, and the conditions under which rooms and areas outside the emergency service area of the hospital are to be used for emergency care and treatment.

- (c) Medical policies, standing emergency medical orders, and written medical procedures to guide the action of nurses and other personnel when a person presents a medical emergency and a physician is not present.
- (i) Medical policies shall delineate the circumstances under which particular medical policies are to be followed, provide for a physician to be called as rapidly as possible, and establish the minimum qualifications or training of persons who may execute particular emergency medical orders.
- (ii) There shall be written procedures, approved in writing by a representative of the medical staff, for any use of defibrillators, respirators or other special medical equipment and for the performance of the special, emergency medical procedures listed in WAC 248-18-285 (4)(c).
- (iii) A standing medical order for administration of a drug or other treatment during a medical emergency shall include: A description of the treatment which includes the name of any drug or other agent; the dosage, concentration or intensity of any drug or other agent; the route or method of administration; where pertinent, the time interval, frequency, or duration of administration; and the signature of a representative of the medical staff.
- (d) Policies which delineate medical staff responsibilities for emergency care services as related to assigned clinical privileges, physician coverage of emergency care services, and physician participation in the training of personnel.
- (e) Policies regarding the notification of an emergency patient's next of kin or legal guardian.
- (f) Policies relevant to obtaining consent for treatment from an emergency patient or other person who may legally give consent for treatment of the patient.

These shall include instructions regarding action to be taken when the condition of an emergency patient and the absence of another person legally able to act on behalf of the patient make it impossible to gain an informed consent for critically needed treatment or consent for critically needed treatment is refused.

- (g) Policies and procedures pertaining to the care and handling of persons whose conditions require special medical or medico-legal consideration.
- (i) Policies and procedures shall prescribe the course of action to be followed in the care of persons who manifest severe emotional disturbances, are under the influence of alcohol or other drugs, are victims of suspected child abuse, are victims of other suspected criminal acts, have a contagious disease, have been contaminated by radioactive material, are diagnosed dead on arrival, or present other conditions requiring special directions regarding action to be taken.
- (ii) Definite provision shall be made for communications, as indicated, with health authorities, police or coroner relative to a person whose condition or its cause are reportable.
- (h) Policies governing special diagnostic and therapeutic services (e.g., clinical laboratory, x-ray, pharmacy, surgery) to emergency patients.

These shall be designed to ensure prompt availability of necessary diagnostic and therapeutic services and establish the types, scope, and extent of the special diagnostic and therapeutic services to be provided for the care of emergency patients.

- (i) Policies regarding notification of an emergency outpatient's personal physician and procedures for transfer of relevant reports to the personal physician.
- (j) Policies regarding disclosure of information about an emergency patient.
- (4) Organization and staffing for emergency care services shall be in accord with the anticipated patient load and the services provided by the hospital.
- (a) There shall be a physician responsible for the medical direction of the hospital's emergency care services. This physician shall be a representative of the medical staff or a physician whose services the hospital has arranged on a regular basis. The functions and responsibilities of the physician responsible for medical direction of the emergency care services shall be delineated in writing and made known to members of the medical and nursing staffs.
- (b) At all times, there shall be a physician on duty or call for emergency care services. A current schedule of the names of on—call physicians and the telephone numbers of these physicians or the call service(s) through which they can be contacted rapidly shall be posted in the emergency care area.
- (c) At all times, there shall be on duty within the hospital at least one registered nurse who is immediately available and responsible for emergency care services and who is qualified to perform the following: Administration of intravenous fluids, electrocardiography and defibrillation of life threatening arrythmias, cardio—pulmonary resuscitation, control of hemorrhage, gastric lavage, and basic neurological evaluation. It is recommended that such a nurse also be qualified to perform endotracheal intubation and arterial puncture.

- (d) There shall be additional nursing staff and other personnel for emergency care services as are necessary to provide the types and amount of care required by patients.
- (i) Staffing for emergency care services shall be adequate to ensure that each applicant for emergency medical care is seen within a period of time commensurate with the nature, acuity and severity of his or her immediate medical need.
- (ii) Each hospital employee engaged in the provision of emergency care shall have had the education and training necessary to perform the emergency medical procedures and other functions and duties for which he or she may be responsible.
- (5) The physical plant facilities, equipment, and supplies for emergency care services shall be commensurate with the scope, types and volume of the services provided by the hospital.
- (a) A hospital which regularly offers emergency care services shall maintain a distinct emergency service area.
- (i) The emergency service area shall be in close proximity to an emergency entrance and separate from the surgery and delivery suites and inpatient nursing units.
- (ii) The emergency service area shall provide adequate space for reception and screening of patients and have examination, treatment, and observation rooms in such numbers, sizes, and arrangements as are necessary to assure safe and effective treatment of patients.
- (iii) There shall be some means of providing visual privacy to patients in all rooms or areas in which patients are examined or treated.
- (iv) At the emergency entrance there shall be an outside night call bell which, when activated, sounds in an area of the hospital in which nursing personnel are always on duty.
- (b) A hospital which limits its emergency care services to care of the occasional emergency patient shall not be required to maintain a distinct emergency service area, but shall designate the area(s) to be used for emergency care and provide the equipment, pharmaceuticals and other supplies essential to providing basic emergency care services required under WAC 248-18-285(1). Emergency equipment and supplies shall be maintained in such a location and manner (e.g., on a "crash" cart) that they may be brought into use immediately upon arrival of a person who presents a medical emergency.
- (c) The equipment, pharmaceuticals and other supplies necessary to provide emergency care services shall be readily available at all times.
- (i) There shall be specific, designated locations for storage of drugs, parenteral solutions, other supplies, instruments and special equipment so personnel can obtain them rapidly.
- (ii) There shall be a system for regular inventory and replenishment of the stock of emergency supplies and equipment to ensure an adequate supply at all times.
- (iii) There should be regular inspection and maintenance servicing of medical equipment to keep it in a safe and operable condition.
- (d) Current references on toxicology, antidote information and the telephone number of the regional poison

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control center shall be readily available in the emergency care area.

- (e) Telephone numbers of the pharmacist, the blood bank, the ambulance service, the Washington state patrol, Military Assistance Safety and Traffic (MAST), the fire department, the police department, local health authorities, the coroner and other persons or organizations emergency service personnel may need to contact rapidly shall be posted in the emergency service area.
- (f) Hospital to ambulance radio communication compatible with the state-wide emergency communication system is recommended for any hospital which regularly provides emergency care services.
- (6) The hospital shall maintain an emergency service register and a medical record for each person who has received emergency care service.
- (a) There shall be a permanent, current register for all emergency patients.
- (i) The register shall contain at least the following data for each person who comes or is brought to the hospital for immediate medical care services: Full name, age, date and time of arrival, the identifying number, the disposition of the patient and the time of the patient's departure from the emergency service area.
- (ii) Data on patients shall be entered in the register in chronological order according to the dates and times of arrivals.
- (iii) Identification data on a person who is dead on arrival shall be entered in the register.
- (b) The hospital shall maintain a medical record for each person who receives emergency care services. Each medical record shall contain the following data.
 - (i) Patient identification data.
- (ii) The date and time of arrival, the means by which the patient came to the hospital and by whom the patient was transported or accompanied.
- (iii) Pertinent history of the patient's injury or illness which may include information on first aid or emergency care given the patient prior to his or her arrival.
- (iv) Description of significant clinical findings derived from an assessment or examination of the patient.
 - (v) Any clinical laboratory or roentgenologic findings.
 - (vi) Diagnosis (tentative or definitive).
 - (vii) Treatment given.
- (viii) Orders for administration of drugs or other treatments which are received by telephone, radio, or verbally from a physician or other person legally authorized to prescribe and acting within the scope of his or her license.

Such a telephone or verbal order shall be received, entered in the patient's medical record and signed by a registered nurse. The counter-signature of the physician or other legally authorized practitioner who gave the order shall be obtained as soon as possible thereafter. This shall not be interpreted to include verbal orders which are received from a physician or other legally authorized practitioner to whom one is providing direct assistance in care of the patient or to include standing emergency medical orders which have been established in accordance with WAC 248–18–285 (3)(c)(iii).

- (ix) Appraisal of the patient upon transfer or departure.
- (x) Disposition of the patient, which shall include a resume of any instruction given to the patient or his family regarding necessary follow—up care.

Entries of data listed as (iv), (vi), (vii), (ix), and (x) above shall be authenticated by the signature of the person who rendered the service.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–350, filed 12/27/90, effective 1/31/91; Order 142, § 248–18–285, filed 2/8/77; Order 119, § 248–18–285, filed 5/23/75; Order 110, § 248–18–285, filed 3/14/75; Order 106, § 248–18–285, filed 1/13/75.]

WAC 246-318-360 Diagnostic and treatment facilities, outpatient services. If the hospital has an organized unit as an outpatient department or clinic, adequate waiting area, examining and treatment rooms, toilets and special rooms necessary for the services to be rendered, shall be provided.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-360, filed 12/27/90, effective 1/31/91; Order 119, § 248-18-290, filed 5/23/75; Order 106, § 248-18-290, filed 1/13/75; Regulation 18.290, effective 3/11/60.]

WAC 246-318-370 Laboratory. (1) Each hospital shall ensure:

- (a) Availability of laboratory services sufficient in size and scope to provide adequate care of all patients minimally to include provisions for:
 - (i) Obtaining blood and blood products,
 - (ii) Performing hemoglobin or hematocrit,
 - (iii) Performing white blood count,
 - (iv) Performing platelet estimate,
 - (v) Performing urinalysis,
 - (vi) Performing blood glucose, and
 - (vii) Performing serum potassium.
- (b) Disposal of contaminated materials in a safe manner (see WAC 248-18-170);
- (c) Appropriate maintenance, safety, and cleanliness of hospital laboratory facilities and equipment (see WAC 248-18-035, 248-18-150, 248-18-155, and 248-18-170);
- (d) Provision for pathology services appropriate to all services available in the hospital.
- (2) Hospitals shall provide laboratory services in accordance with guidelines for laboratory quality assurance program, WAC 248–18–99910.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–370, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 87–23–056 (Order 2560), § 248–18–300, filed 11/18/87; Order 119, § 248–18–300, filed 5/23/75; Regulation 18.300, effective 3/11/60.]

WAC 246-318-380 Diagnostic and therapeutic radiology and other imaging services. (1) Hospitals shall:

- (a) Ensure availability of radiologic services appropriate to the type and scope of hospital services offered for inpatients and outpatients; and
- (b) Provide a written description of the type and scope of nuclear medicine and other diagnostic and therapeutic imaging services when provided in the hospital for inpatients and outpatients.

- (2) Hospitals with imaging services shall:
- (a) Designate medical responsibility to a physician member of the medical staff and require access to a radiologist, if radiologic services are provided in the hospital;
- (b) Designate medical responsibility to one or more physician members of the medical staff qualified in nuclear medicine, if nuclear medicine services are provided;
- (c) Designate medical responsibility to one or more physician members of the medical staff qualified in the appropriate specific imaging specialty if other imaging services are provided;
- (d) Require performance of radiology, nuclear, and other imaging services only when:
- (i) Ordered, in writing, by a member of the medical staff; or
- (ii) In accordance with hospital policy and procedures; and
- (e) Provide sufficient numbers of personnel and medical staff qualified to safely deliver the type, scope, and volume within each imaging service including:
- (i) At least one diagnostic radiologic technician, technologist, or physician available to come to the hospital to perform diagnostic procedures at all times;
 - (ii) Performance of therapeutic radiologic services by:
 - (A) A radiologist or radiation oncologist; or
- (B) A therapeutic radiologic technologist directed by a radiologist or radiation oncologist;
 - (iii) Performance of diagnostic radiologic services by:
 - (A) A physician or radiologist; or
- (B) A diagnostic radiologic technician under policies and procedures approved by a radiologist; and
- (iv) After December 31, 1990, performance of nuclear medicine services by a nuclear medicine technologist or by a physician member of the medical staff qualified in nuclear medicine.
- (f) Establish policies and procedures approved by administration, a radiologist, and other medical staff qualified in the specialties provided including:
- (i) Protection of patients and others from radiation hazards including shielding for syringes, vials, and sources of radioactivity;
- (ii) Patient preparation, patient examination, and administration of diagnostic agents;
- (iii) Medical staff responsibility for preparation and administration of radiopharmaceuticals;
 - (iv) Designating authorized users of the equipment;
 - (v) Safe operation of equipment;
- (vi) Safe handling, storage, preparation, labeling, transporting, and disposal of radioactive materials;
- (vii) Precautions to minimize unnecessary radiation exposure to patients and others;
- (viii) Actions required in event of radioactive contamination of patients, personnel, equipment, and environment;
- (ix) Prevention of electrical, mechanical, fire, explosion, and other hazards; and
- (x) Written reports on any adverse reaction of a patient to diagnostic or therapeutic agents, including notation in the medical record or outpatient report.

- (3) Hospitals providing any imaging service shall provide:
 - (a) Adequate space and facilities for:
 - (i) Patient privacy;
 - (ii) Patient access to a toilet;
 - (iii) Patient examinations;
 - (iv) Patient reception;
 - (v) Patient dressing rooms;
 - (vi) Exposed and unexposed film storage; and
- (vii) Safe storage, preparation, labeling, transportation, and disposal of radioactive materials.
- (b) Maintenance of safe, clean equipment, facilities, and supplies appropriate for the type and scope of service offered;
- (c) Maintenance of all patient care equipment in safe, operating condition;
- (d) Emergency equipment, supplies, and medications required under WAC 248-18-251(5); and
- (e) A method for summoning extra appropriate staff for emergencies arising in imaging service areas.
- (4) Hospitals providing radiologic areas, rooms, and services shall:
- (a) Conduct radiologic services in a safe, appropriately equipped area of the hospital, shielded as necessary to prevent radiation hazards to individuals;
- (b) Maintain radiology equipment meeting applicable state rules for radiation protection under chapter 402–28 WAC; and
- (c) Arrange for services of a qualified expert defined and described under WAC 402-32-100 as needed for:
- (i) Consultation, including periodic radiologic safety testing;
 - (ii) Supervision of radiation safety measures; and
 - (iii) Participation in education programs.
 - (5) Hospitals with imaging services shall:
- (a) Maintain authenticated and dated reports of diagnostic and therapeutic procedures, consultations, and interpretations in each patient's medical record;
- (b) Retain hard copies or electronic access to authenticated interpretative reports for films, consultations, and therapeutic procedures in the imaging service area for a period defined by the hospital;
- (c) Require hospital-authorized practitioners to provide a reason for each examination on all requests for services:
- (d) Require authentication of interpretative reports by:
 - (i) The radiologist for radiology reports; or
- (ii) A designated physician member of the medical staff qualified in the appropriate, specific imaging specialty.
- (e) Retain patient logs for imaging services and records of equipment calibration inspections and quality assurance testing in the imaging service area for a period defined, in writing, by the hospital;
- (f) Maintain records of receipt and disposition of radioactive materials; and
 - (g) Maintain documentation of:
- (i) Maintenance and periodic calibration of all radiation safety equipment;

- (ii) Maintenance of all patient care equipment in a safe, operating condition; and
- (iii) Calibration of diagnostic and treatment radiologic equipment by:
- (A) A qualified expert defined and required under WAC 402-34-190; or
- (B) An individual qualified according to manufacturer's specifications for a particular piece of equipment.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-380, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 89-22-109 (Order 008), § 248-18-311, filed 11/1/89, effective 12/2/89.]

- WAC 246-318-390 Physical and occupational therapy services. (1) Definition "authorized health care practitioner" means physicians and other licensed individuals as defined in RCW 18.74.010(7).
- (2) Each hospital shall clearly define physical therapy (PT) and occupational therapy (OT) services in a written statement describing the scope of diagnostic, therapeutic, and rehabilitative services provided for inpatients and outpatients.
- (3) Policies and procedures. When a hospital offers PT or OT services, written policies and procedures shall be established and followed including instructions for:
 - (a) Patient care protocols.
 - (b) Operation and application of equipment.
 - (c) Equipment maintenance and monitoring.
 - (d) Infection control practices including:
 - (i) Cleaning,
 - (ii) Disinfecting,
 - (iii) Sterilizing, and
 - (iv) Changing of equipment.
 - (e) Documentation.
 - (f) Periodic review of policies and procedures with:
 - (i) Revision as needed,
- (ii) Documentation of date and name of reviewers, and
 - (iii) Written approval of revisions by:
- (A) The appropriate committee or group including medical staff representation, or
 - (B) A member of the medical staff.
- (g) What to do when physician or prescribing practitioner orders are unclear or incomplete. (Complete orders include modality, frequency, date, time, and authentication.)
 - (4) Medical direction and personnel.
 - (a) Hospital OT and PT services shall be:
- (i) Under the direction of a member of the active medical staff, or
- (ii) Under the direction of a committee chaired by a member of the active medical staff.
 - (b) Hospitals shall provide:
- (i) Adequate numbers of qualified personnel in accordance with the scope and volume of OT and PT services.
- (ii) Inservice and orientation for PT and OT personnel with appropriate documentation.
- (5) Patient treatment plan. Hospitals shall require a written OT and PT treatment plan for each patient receiving a PT or OT treatment service, to include:

- (a) Identification of short and long term goals,
- (b) Identification of patient's problems and limitations,
 - (c) Description of planned procedures and modalities.
- (6) Authorization and documentation. When OT or PT treatment services are provided, the hospital shall require and ensure:
 - (a) Medical authorization of treatments evidenced by:
- (i) Written authentication by a member of the medical staff for all inpatient treatment services provided, or
- (ii) Written authentication by the authorized health care practitioner issuing the order for outpatient treatments, according to hospital policy and procedures.
- (b) Entry of written, verbal, and telephone orders into the appropriate individual medical record.
 - (c) Use of standing orders only when:
- (i) Dated and signed by a member of the medical staff,
- (ii) Reviewed annually and renewed by written approval (dated authentication) of each order, and
- (iii) A copy of the order is inserted into the appropriate individual medical record.
- (d) Documentation in the medical record of PT and OT services provided for a patient to include:
 - (i) Date,
 - (ii) Time treatment was initiated,
 - (iii) Type of therapy service performed,
- (iv) Periodic assessment of the response of the patient, and
- (v) Authentication by the person performing the service.
 - (7) Space and equipment. Hospitals shall provide:
 - (a) Adequate space designated for:
 - (i) Reception,
 - (ii) Recordkeeping, and
 - (iii) Treatments,
 - (iv) Storage of equipment and supplies.
 - (b) Patient dressing and toilet facilities,
 - (c) Patient privacy,
- (d) Safe, functional, and appropriate equipment for any PT and OT service provided, and
 - (e) Calibration of equipment with documentations,
 - (f) System for equipment maintenance.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–390, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 87–03–030 (Order 2464), § 248–18–312, filed 1/14/87.]

- WAC 246-318-400 Respiratory care services. (1) Respiratory care services shall be clearly defined in a written statement that describes the scope of diagnostic, therapeutic and rehabilitative cardio-pulmonary services provided for inpatients and outpatients.
 - (2) Policies and procedures.
- (a) Written policies and procedures for respiratory care services shall be developed and implemented and shall include instructions for the following: Patient care techniques; operation and application of equipment; equipment maintenance and monitoring; infection control practices including cleaning, disinfecting, sterilizing

and changing of equipment; use and storage of medications, drugs and chemicals.

- (b) Policies and procedures shall be periodically reviewed, revised as needed and approved by the appropriate committee with medical staff representation or by member of the medical staff.
 - (3) Medical direction and personnel.
- (a) The respiratory care services shall be under the medical direction of a member of the active medical staff or a committee chaired by a member of the active medical staff.
- (b) Respiratory care services shall have an adequate number of qualified personnel in accordance with the scope and volume of services.
- (c) In-service shall be provided and documented for respiratory care service personnel.
 - (4) Authorization and documentation.
- (a) Respiratory care services provided for a patient shall be authorized in writing and signed by a physician. Verbal and telephone orders shall be signed by a physician.
- (b) Routine and standing orders, when used, shall be reviewed annually and signed by the appropriate member of the active medical staff.
- (c) Respiratory care services provided for a patient shall be reported in the medical record. The record shall include the date, time, type of respiratory service performed, medications, assessment of the response of the patient, and signature of the person performing the service.
- (d) There shall be a policy statement describing what to do when physician orders are unclear or incomplete.
 - (5) Space.
- (a) There shall be adequate space designated in the hospital for reception, treatments and/or respiratory services, recordkeeping, storage for equipment, supplies and drugs.
- (b) Space for treatments and for processing of equipment and materials shall be organized and maintained to prevent cross—contamination.
- (c) Equipment and instruments shall be safe, functional, and appropriate for respiratory care services provided. There shall be documentation of the calibration and maintenance systems.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-400, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 79-04-081 (Order 176), § 248-18-315, filed 4/2/79.]

- WAC 246-318-410 Other services. Hospitals offering and providing diagnostic or therapeutic services other than those specified elsewhere in chapter 248-18 WAC shall:
- (1) Maintain adequate space and equipment for the scope of services offered.
 - (2) Provide for patient privacy.
- (3) Require professional staff licensure when required by state statute.
- (4) Require evidence of specific medical staff orders for any diagnostic services or treatments for inpatients.

- (5) Establish policy and procedure addressing referral orders issued by persons other than medical staff for outpatient treatments and diagnostic services.
- (6) Maintain appropriate pharmacist participation as described in WAC 248-18-190 (1)(n) and (2)(f).
- (7) Establish policies and procedures specific to operation of each service offered minimally to include:
 - (a) Providing orientation and inservice for staff,
 - (b) Ensuring patient safety and infection control,
- (c) Providing maintenance and calibration of equipment, and
- (d) Maintaining coordination with other hospital services.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-410, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 87-03-030 (Order 2464), § 248-18-321, filed 1/14/87.]

WAC 246-318-420 Hospital pharmacy. Each hospital shall provide evidence of current approval by the Washington state board of pharmacy pursuant to chapter 18.64 RCW and chapter 360-17 WAC.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–420, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 43.20.050 and 70.41.030. 84–02–036 (Order 271), § 248–18–331, filed 12/30/83. Formerly WAC 248–18–330.]

WAC 246-318-430 Intravenous preparation. (1) There shall be written policies and procedures including:

- (a) Preparation of intravenous solutions, medications, and admixtures. "Intravenous admixture" means a solution with addition of medication or an altered solution intended for intravenous use.
- (b) Infection control policies and procedures approved by the infection control or an equivalent committee, and including:
- (i) Aseptic preparation of intravenous admixtures and medications in a clean, low-traffic area, preferably under a clean air center.
- (ii) Cleaning and preventive maintenance of clean air centers.
- (c) Information required on all orders or prescriptions for intravenous solutions, admixtures, and medications, which shall minimally include identification of solution or medication, rate of flow or frequency, duration, strength of additive, dilution ratio of solution, identification of patient, and identification of prescribing practitioner.
- (2) Individuals preparing intravenous solutions and admixtures shall be legally authorized, trained in procedures and equipment, and approved by the hospital.
- (3) There shall be drug compatibility reference material readily available to those who prescribe, prepare, and administer intravenous admixtures.
- (4) Intravenous solution containers shall be labeled to include patient name, identification of solution, identification and strength of additives, volume, rate of flow, expiration time and date of admixture, any special requirement for handling and storage, and identification of individual preparing admixture. There shall be procedures for appropriate labeling of precision volume

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chambers during times such are used for administering admixtures.

(5) There shall be policy and procedures for frequency of reordering intravenous solutions and admixtures.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-430, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 83-13-061 (Order 261), § 248-18-335, filed 6/15/83.]

WAC 246-318-435 Intravenous administration. (1) There shall be written policies and procedures including:

- (a) Administration of intravenous solutions, medications, admixtures, blood, and blood products.
- (b) Infection control policies and procedures approved by the infection control or an equivalent committee, and including:
 - (i) Site preparation.
 - (ii) Tubing and dressing management.
 - (iii) Site assessment and rotation.
- (c) Use and control of intravenously administered investigational drugs.
- (d) Administration of parenterally administered drugs causing tissue necrosis upon extravasation.
 - (e) Documentation requirements.
 - (f) Patient teaching and discharge instruction.
- (g) All orders or prescriptions for intravenous solutions, admixtures, and medications shall minimally include identification of solution or medication, rate of flow or frequency, duration, strength of additive, dilution ratio of solution, identification of patient, and identification of prescribing practitioner.
 - (h) Use of electronic infusion control devices.
- (2) Personnel inserting intravenous devices shall be legally authorized and appropriately trained with demonstrated and documented skills in intravenous insertion techniques.
- (3) Personnel administering intravenous solutions and admixtures shall be legally authorized to administer medications with appropriate training, demonstrated and documented skill in intravenous administration, procedures, equipment, and approval of the hospital.
- (4) There shall be drug compatibility reference material readily available to individuals who administer intravenous medications and admixtures.
- (5) Intravenous solutions shall be administered only upon the order of a legally authorized practitioner authorized by hospital policy to prescribe drugs in the hospital.
- (6) Intravenous solution containers shall be labeled to include patient name, identification of solution, identification and strength of additives, volume, rate of flow, expiration time and date of admixture, any special requirement for handling and storage, and identification of individual preparing admixture. There shall be procedures for appropriate labeling of precision volume chambers during times such are used for administering admixtures.
- (7) There shall be documentation in the medical record to include:
- (a) Solution, medication or medications, time, date, amount administered, and rate;

- (b) Site and site assessment;
- (c) Date and time of insertion and removal of cannula;
- (d) Device used, including gauge, length and type needle, or cannula;
- (e) Condition of cannula and site at the time removed from patient;
 - (f) Use of electronic infusion devices;
- (g) Observed complications and treatment of complications;
 - (h) Management of tubing and dressing; and
- (i) Signature. An initial signature identification system is acceptable.
- (8) Administration of intravenous preparations to pediatric patients shall comply with regulations in this section and WAC 248–18–215.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–435, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 83–13–061 (Order 261), § 248–18–336, filed 6/15/83.]

- WAC 246-318-440 Records and reports—Medical record system. Each hospital shall have a well-defined medical record system with facilities, staff, equipment, and supplies necessary to develop, maintain, control, analyze, retrieve, and preserve patient care data and medical records.
- (1) Medical record service. Hospitals shall establish an organized medical record service, consistent with recognized principles of medical record management, directed, staffed, and equipped to ensure:
- (a) Timely, complete and accurate checking, processing, indexing, filing, and preservation of medical records; and
- (b) The compilation, maintenance, and distribution of patient care statistics.
- (2) Policies and procedures related to medical record system. Hospitals shall establish and follow current written policies and procedures related to the medical record system, including requirements for:
- (a) An established format for patients' individual medical records;
- (b) Access to and release of data in patients' individual medical records and other medical data considering the confidential nature of information in these records;
- (c) The retention, preservation, and destruction of medical records; and
- (d) Maintenance and disposition of medical and other records in Washington state owned or operated hospitals as required in chapter 40.14 RCW and rules promulgated under chapter 40.14 RCW.
 - (3) Patients' medical records, general. Hospitals shall:
- (a) Develop and maintain an individual medical record for each person, including each neonate, receiving care, treatment, or diagnostic service at the hospital except as permitted in subsection (4)(b) of this section;
- (b) Establish a systematic method for identifying each patient's medical record or records to allow ready identification, filing, and retrieval of all of the patient's record or records;

- (c) Require prompt, pertinent entries in a patient's medical record on:
 - (i) A significant observation;
 - (ii) Any diagnostic or treatment procedure; and
- (iii) Other significant events in a patient's clinical course or care and treatment.
 - (d) Require entries to include:
 - (i) A date;
- (ii) Authentication by the individual assuming responsibility for the entry; and
 - (iii) A time in accordance with hospital policy.
- (e) File the originals or durable, legible, direct copies of originals of reports in patients' individual medical records:
- (f) Enter all diagnoses and operative procedures in patients' medical records in terminology consistent with a recognized system of disease and operations nomenclature;
- (g) Require legible entries in a patient's medical record which are:
 - (i) Written in ink;
 - (ii) Typewritten; or
- (iii) Recorded on a computer terminal designed to receive such information.
 - (4) Hospitals may:
- (a) Store entries on magnetic tapes, discs, or other devices suited to the storage of data;
- (b) Maintain a simple record system instead of the individual medical records required under subsections (3) and (4)(c) of this section for patients receiving only referred outpatient diagnostic services, as defined in WAC 248-18-001, provided the system permits:
 - (i) Identification of patient; and
- (ii) Filing and retrieval of authenticated reports on all tests or examinations provided to any patient receiving services.
- (c) Limit content in individual medical records for patients who would be considered referred outpatients, except for use of parenteral injections during diagnostic tests to:
- (i) Relevant history and physical findings where indicated;
 - (ii) Known allergies or idiosyncratic reactions;
 - (iii) Diagnostic interpretation;
 - (iv) Written consent; and
 - (v) Identifying admission data.
- (5) Patients' medical records, content. Hospitals shall require and ensure entry of the following data into a medical record for each period a patient receives inpatient or outpatient services with exceptions only as specified in subsection (4) of this section and WAC 248-18-285(6):
 - (a) Admission data including:
 - (i) Identifying and sociological data;
- (ii) The full name, address, and telephone number of the patient's next of kin or, when indicated, another person with legal authority over the person of the patient;
- (iii) The date of the patient's admission as an inpatient or outpatient;
- (iv) The name or names of the patient's attending physician or physicians; and

- (v) The admitting or provisional diagnosis or description of medical problem.
- (b) A report on any medical history obtained from the patient;
- (c) Report or reports on the findings of physical examination or examinations performed upon the patient;
- (d) An entry on any known allergies of the patient or known idiosyncratic reaction to a drug or other agent;
 - (e) Authenticated orders for:
- (i) Any drug or other therapy administered to a patient;
 - (ii) Any diet served to the patient;
- (iii) Any standing medical orders used in the care and treatment of the patient except standing medical emergency orders; and
 - (iv) Any restraint of the patient.
 - (f) Reports on all:
 - (i) Roentgenologic examinations;
 - (ii) Clinical laboratory tests or examinations;
- (iii) Macroscopic and microscopic examinations of tissue;
- (iv) Other diagnostic procedures or examinations performed upon the patient; and
 - (v) Specimens obtained from the patient.
- (g) An entry on each administration of therapy, including drug therapy, to the patient;
- (h) Entries on nursing services to the patient including:
- (i) A report on all significant nursing observations and assessments of the patient's condition or response to care and treatment;
- (ii) Nursing interventions and other significant direct nursing care including all administration of drugs or other therapy;
- (iii) An entry on the time and reason for each notification of a physician or patient's family regarding a significant change in the patient's condition; and
- (iv) A record of other significant nursing action on behalf of the patient.
- (i) An entry on any significant health education, training, or instruction provided to the patient or family related to the patient's health care;
- (j) An entry on any social services provided the patient;
 - (k) An entry regarding:
 - (i) Any adverse drug reaction of the patient; and
- (ii) Any other untoward incident or accident occurring during hospitalization or outpatient visit and involving the patient.
- (1) Operative report or reports on all surgery performed upon the patient;
- (m) An entry or report on each anesthetic administered to the patient;
- (n) Report or reports on consultation or consultations concerning the patient;
- (o) Reports on labor, delivery, and postpartum period for any woman giving birth to a child in the hospital;
- (p) Infant status data for any infant born in or enroute to the hospital including:
 - (i) The date and time of birth;
 - (ii) Condition at birth or upon arrival at the hospital;

- (iii) Sex; and
- (iv) Weight, if condition permits weighing.
- (q) Progress notes describing the results of treatment and changes in the patient's condition and portraying the patient's clinical course in chronological sequence;
- (r) In the event of an inpatient leaving without medical approval, an entry on:
- (i) Any known events leading to the patient's decision to leave:
- (ii) A record of notification of the physician regarding the patient's leaving; and
 - (iii) The time of the patient's departure.
 - (s) Discharge data including:
 - (i) The final diagnosis or diagnoses;
- (ii) Any associated or secondary diagnoses or complications; and
- (iii) The titles of all operations performed upon the patient; and
- (iv) A discharge summary for any inpatient whose hospitalization exceeded forty—eight hours, except a normal newborn infant or normal obstetrical patient, to:
- (A) Recapitulate significant clinical findings and events during the patient's hospitalization;
- (B) Describe the patient's condition upon discharge or transfer; and
- (C) Summarize any recommendations and arrangements for future care of the patient.
- (t) An entry on any transmittal of medical and related data regarding the patient to a health care facility or agency or other community resource when the patient was referred or transferred;
- (u) In event of the patient's death in the hospital, entries, reports, and authorizations including:
 - (i) A pronouncement of death;
 - (ii) An authorization for the autopsy, if performed;
- (iii) A report on the autopsy, if performed, including findings and conclusions; and
- (iv) An entry on release of the patient's body to a mortuary or coroner or medical examiner.
- (v) Written consents, authorizations, or releases given by the patient or, if the patient was unable to give such consents, authorizations, or releases, by a person or agency with legal authority over the person of the patient;
- (w) The relationship, legal or familial, of the signer to the patient clearly stated when a person other than the patient gives written consent, or authorizes treatment, or signs a release.
- (6) Hospitals shall regard materials obtained through procedures employed in diagnosing a patient's condition or assessing the patient's clinical course as original clinical evidence excluded from requirements for content of medical records in subsection (5) of this section. Original clinical evidence includes, but is not limited to:
 - (a) X-ray films;
 - (b) Laboratory slides;
 - (c) Tissue specimens; and
 - (d) Medical photographs.
 - (7) Registers.
- (a) Hospitals shall maintain current registers with data entered in chronological order including:

- (i) An inpatient register containing at least the following data for each inpatient admission:
 - (A) The patient's identifying number;
- (B) The patient's full name, and birth date or age; and
 - (C) The date of the patient's admission.
- (ii) One or more outpatient registers other than registers for emergency care services to:
- (A) Contain sufficient data on each outpatient to ensure positive identification; and
- (B) Permit rapid retrieval of all of the outpatient's medical record or records when indicated.
- (iii) An emergency service register as required under WAC 248-18-285 (6)(a);
- (iv) An operation register containing at least the following data for each operation performed in a hospital surgery:
 - (A) The date;
- (B) The identifying number and full name of the patient;
 - (C) The descriptive name of the operation;
- (D) The names of the surgeon and the surgeon's assistant or assistants;
 - (E) The type of anesthesia; and
- (F) The name and title of the person who administered the anesthesia.
- (b) Hospitals may maintain separate registers or suitable combinations of registers if the combined register contains data for each specific register as required in subsection (7)(a) of this section.
 - (8) Indexes. Hospitals shall establish and maintain:
- (a) A master patient index containing a master reference card or equivalent for each person receiving inpatient or outpatient care or treatment in the hospital.
 - (i) Master reference cards or equivalent shall contain:
 - (A) The patient's medical record number or numbers;
 - (B) The patient's full name; and
 - (C) The patient's date of birth.
 - (ii) Master patient indexes may be omitted for:
 - (A) Referred outpatients; and
- (B) Outpatient emergency patients provided the hospital retains and preserves an emergency service register for the same period of time as the medical record.
- (b) Current indexes with required entries on index cards or equivalent completed within three months after discharge or transfer of the patient;
- (c) A disease index containing index cards or equivalent for all categories of diseases or conditions treated in the hospital on an inpatient basis with entries on index card or cards for a given category of disease including:
- (i) The identifying number, sex, and age of each patient treated for that category of disease; and
- (ii) The code for the particular disease or condition for which each patient was treated.
- (d) An operation index containing index cards or equivalent for all categories of operations performed in a hospital surgery on an inpatient or outpatient basis with entries on the index card or cards for a given category of operation with:

- (i) Identifying information including the medical record number, age, and sex of each patient upon whom that category of operation was performed; and
- (ii) The code for the particular operative procedure performed upon each patient.
- (e) Codes for entries in the disease and operation indexes in accordance with the coding system and the recognized diagnostic classification system of disease and operation nomenclature adopted by the hospital;
- (f) A physicians' index, separate or combined with the disease and operation indexes, as follows:
- (i) A combined physician's-disease operation index with the name or code number of the physician treating the patient to whom a particular entry pertains; or
 - (ii) A separate physicians' index containing:
- (A) A record for every member of the hospital's medical staff; and
- (B) Entries on each physician's index card or equivalent record including the medical record number or name of each patient the particular physician treated in the hospital on an inpatient basis.
- (9) Reports on hospital services. Hospitals shall prepare the following separate or combined reports:
 - (a) Census reports including:
- (i) A daily inpatient census report on admissions to inpatient services, births, and discharges including deaths and transfers to another health care facility; and
- (ii) Regular monthly or more frequent reports on admissions to outpatient services and the number of emergency care patients.
 - (b) Analyses of hospital services.
- (10) Storage, handling, and control of medical records and other medical data. Hospitals shall:
- (a) Control access to patients' individual medical records and other personal or medical data on patients;
 - (b) Prevent access to records by unauthorized persons;
- (c) Protect medical records and other personal and medical data from undue deterioration or destruction; and
- (d) Maintain a system permitting easy retrieval of medical records and information for medical or administrative purposes.
- (11) Retention, preservation, and final disposal of medical records and other patient care data and reports.
 - (a) Hospitals shall retain and preserve:
- (i) Each patient's medical record or records, excluding reports on referred outpatient diagnostic services for a period of:
- (A) No less than ten years following the most recent discharge of the adult patient; or
- (B) For patients who are minors at the time of care, treatment, or diagnosis, no less than three years following the date upon which the minor patient attained the age of eighteen years or ten years following the most recent discharge, whichever is longer.
- (ii) Reports on referred outpatient diagnostic services for at least two years;
- (iii) A master patient index card (or equivalent) for at least the same period of time as the medical record or records for the patient to whom the master patient index card or equivalent pertains;

- (iv) Data in the inpatient and outpatient registers for at least three years;
- (v) Data in an emergency service register for at least the same period of time as the medical record or records for any patient on whom data were entered in the register;
- (vi) Data in the operation register, the disease and operation indexes, the physicians' index, and annual reports on analyses of hospital services for at least three years; and
- (vii) Patients' medical records, registers, indexes, and analyses of hospital service in original form or in photographic form in accordance with the provisions of chapter 5.46 RCW.
- (b) A hospital may elect to retain and preserve an emergency service register for only three years after last entry if the hospital includes all outpatient emergency care patients in the master patient index.
- (c) During final disposal, each hospital shall prevent retrieval and subsequent use of any data permitting identification of individuals in relation to personal or medical information.
- (d) In event of transfer of ownership of the hospital, the hospital shall keep patients' medical records, registers, indexes, and analyses of hospital services in the hospital to be retained and preserved by the new owner in accordance with state statutes and regulations.
 - (e) If the hospital ceases operation, the hospital shall:
- (i) Make immediate arrangements for preservation of its medical records and other records of or reports on patient care data in accordance with applicable state statutes and regulations; and
- (ii) Obtain approval of the department for the planned arrangements prior to the cessation of operation.
- (12) Records kept by approved eye banks pursuant to WAC 248-33-100 are not medical records or registers within the meaning of this section.
- (13) Nothing in these regulations shall be construed to prohibit hospitals from collecting additional health and/or medical information or retaining medical records beyond the statutory requirements.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \S 246–318–440, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 88–18–021 (Order 2680), \S 248–18–440, filed 8/30/88; 85–23–020 (Order 2305), \S 248–18–440, filed 11/13/85; Order 142, \S 248–18–440, filed 2/8/77; Order 135, \S 248–18–440, filed 12/6/76; Order 119, \S 248–18–440, filed 5/23/75; Regulation 18.440, effective 3/11/60.]

WAC 246-318-450 Discharge planning. Hospitals shall:

- (1) Establish and maintain a system for discharge planning and designate a person responsible for system management and implementation;
 - (2) Establish written policies and procedures to:
- (a) Identify patients needing further nursing, therapy, or supportive care following discharge from the hospital;
- (b) Develop a documented discharge plan for each identified patient including:
- (i) Coordinate with patient and family or caregiver, as appropriate;

- (ii) Coordinate with appropriate members of the health care team; and
- (iii) Coordinate with the receiving agency or agencies, when necessary.
- (c) Notify referral agencies, minimally to include verbal contact and communication regarding:
 - (i) Relevant patient history;
- (ii) Specific care requirements including equipment, supplies, and medications needed; and
 - (iii) Date care is to be initiated.
- (d) For those patients identified under subsection (2)(a) of this section, assess and document needs and implement discharge plans to the extent possible by the hospital.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as \$ 246-318-450, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 88-18-020 (Order 2679), \$ 248-18-445, filed 8/30/88.]

NEW CONSTRUCTION REGULATIONS

WAC 246-318-500 Applicability of these regulations governing hospital construction. (1) These regulations apply to new construction of hospitals covered by RCW 70.41.020 (section 2, chapter 267, Laws of 1955). New construction shall include any of the following started after promulgation of these regulations:

- (a) New buildings to be used as hospitals;
- (b) Additions to existing buildings to be used as hospitals;
- (c) Conversions of existing buildings or portions thereof for use as hospitals;
- (d) Alterations other than minor alterations to existing hospitals.
- (2) These regulations cover the facilities generally required within a hospital, with the following provisions.
- (a) Omission of required facilities for some services may be permitted provided definite arrangement has been made for adequate services from suitably located facilities outside the hospital.
- (b) Hospitals restricting services to legally allowable and customarily recognized limitations may be permitted to omit required facilities for the services not to be provided.
- (c) Facilities provided, not specifically required by these regulations, must be adequate for the services to be performed and must meet the objectives of these regulations.

Note:

¹See WAC 248-18-001 for definition of "hospital."

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as \S 246–318–500, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030 and 43.20.050. 83–19–058 (Order 269), \S 248–18–500, filed 9/20/83. Statutory Authority: RCW 70.41.30 [70.41.030]. 81–05–029 (Order 209), \S 248–18–500, filed 2/18/81; Order 119, \S 248–18–500, filed 5/23/75; Order 50, \S 248–18–500, filed 12/17/70; Regulation 18.500, filed 1/25/62.]

WAC 246-318-501 Legal authority of the department. See RCW 70.41.030.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–501, filed 12/27/90, effective 1/31/91. Statutory Authority: 1985 c 213. 86–08–002 (Order 2348), § 248–18–999, filed 3/20/86; Order 119, § 248–18–999, filed 5/23/75; Regulation 18.999, effective 3/11/60.]

WAC 246-318-510 Programs, drawings and construction. (1) Professional design services. Drawings and specifications for new construction shall be prepared by, or under the direction of, an architect registered in the state of Washington, and shall include plans and specifications prepared by consulting professional engineers for the various branches of the work where appropriate; except the services of a registered professional engineer may be used in lieu of the services of an architect if work involves engineering only. If the work involved is believed to be not extensive enough to require professional design services, a written description of the proposed construction should be submitted to the department for a determination of the applicability of this regulation.

(2) Submission for review. The program and drawings for new construction shall be submitted in the following stages for review. Each room, area and item of fixed equipment and major movable equipment shall be identified on all drawings to demonstrate that the required facilities for each function have been provided.

- (a) A written program containing, at a minimum, information concerning services to be provided and operational methods to be used which will affect the extent of facilities required by these regulations. If the project involves an addition or alteration which materially increases the bed capacity of the hospital, the program shall contain a thorough appraisal of all existing supporting services to determine their adequacy for the increased number of patients.
- (b) Preliminary drawings of the new construction including major equipment. For alterations and additions, a functional layout of the existing building must be included. The hospital should be designed so that it may be expanded to provide for anticipated future needs. The future additions and their proposed functions should be designated on the preliminary plans.
- (c) Detailed working drawings and specifications including mechanical and electrical work.
- (d) If carpets are to be used, the following information is to be submitted for review:
- (i) A floor plan showing areas to be carpeted and adjoining areas. These areas shall be labeled, according to function, and the proposed carpeted areas coded on the plan and keyed to the appropriate carpet sample.
- (ii) One 3" x 5" sample of each carpet type, labeled to identify the following:
 - (A) Manufacturer; and
- (B) Specific company designation (trade name and number).
- (iii) Information showing that proposed carpeting meets the specifications as listed in WAC 248-18-719(5).
- (iv) Carpets may be used in the following nonpatient occupied areas: administrative areas, lobbies, lounges, chapels, waiting areas, nurses' station, dining rooms,

- corridors, equipment alcoves opening onto carpeted corridors. Carpets are not permitted in any areas of the surgery or delivery suites. Carpets may be used in other areas only upon written approval of such use by the department.
- (v) Carpets may be used in the following patient occupied areas: Patient rooms (excluding toilets, bathrooms, and designated isolation rooms), coronary care units, recovery rooms (not within surgical suites), labor rooms (not within delivery suites), corridors within patient occupied areas, dayrooms, equipment alcoves opening onto carpeted corridors. Carpets may be used in other areas only upon written approval of such use by the department.
 - (3) Construction.
- (a) Construction, of other than minor alterations, shall not be commenced until the final drawings and specifications have been stamped "construction authorized" by the department. Such authorization by the department does not constitute release from the requirements contained in these regulations.
- (b) Compliance with these regulations does not constitute release from the requirements of applicable state and local codes and ordinances. These regulations must be followed where they exceed other codes and ordinances.
- (c) Notification shall be given the department when construction is commenced. If construction takes place in or near occupied areas, adequate provision shall be made for the safety and comfort of patients.
- (d) Construction shall be completed in compliance with the final drawings and specifications. Addenda or modifications which might affect the fire safety or functional operation shall be submitted for review by the department.
- (4) Department's reports on reviews or on-site construction inspections. The department shall identify the sections and items of chapter 248-18 WAC under which a requirement is stated or a deficiency noted in any written report on a review of a functional program, drawings or specifications and in any report on an on-site inspection of a construction project.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–510, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.41 RCW. 90–12–014 (Order 061), § 248–18–510, filed 5/30/90, effective 6/30/90. Statutory Authority: RCW 70.41.30 [70.41.030]. 81–05–029 (Order 209), § 248–18–510, filed 2/18/81. Statutory Authority: RCW 43.20.050. 80–03–062 (Order 193), § 248–18–510, filed 2/26/80; Order 123, § 248–18–510, filed 3/18/76; Order 119, § 248–18–510, filed 5/23/75; Order 9, § 248–18–510, filed 1/2/69; Regulation 18.520 (part), filed 1/25/62.]

- WAC 246-318-520 Design and construction standards, general. (1) Exemptions, substitutions, and interpretations. A hospital may request an exemption, substitution, or interpretation as described in WAC 248-18-010.
- (2) Industry standards, guides, and codes adopted by reference.
- (a) At least once every two years, the department shall:

- (i) Review industry standards referenced in the construction section of chapter 248-18 WAC and update, as necessary; and
- (ii) Adopt the revised list of referenced standards, if required.
 - (b) Hospitals shall:
- (i) Submit preliminary drawings for hospital construction projects conforming to industry standards, guides, and codes appearing in the current chapter 248–18 WAC;
- (ii) Follow applicable standards, guides, and codes of chapter 248–18 WAC existing at the time the preliminary document was submitted for the duration of construction project; except as specified in subsection (2)(c) of this section.
- (c) The department may respond to a hospital's written request by giving written approval to use a more recent edition of an industry standard, guide, or code under the following conditions:
- (i) The standard, guide, or code was adopted after preliminary drawings were developed; and
- (ii) The request is received by the department prior to the department's final approval of project design and authorization for construction per WAC 248-18-510 (3)(a).
- (3) Hospitals and the department shall interpret construction WAC as follows:
- (a) Rules concerning the size, location, function, and major equipment of rooms and areas are generally found under headings for particular departments or facilities;
- (b) Some service facilities common to several departments or units are grouped under "GENERAL REQUIREMENTS FOR SERVICE FACILITIES," WAC 248-18-711;
- (c) Mechanical and electrical requirements and detailed architectural requirements are included in "GENERAL DESIGN REQUIREMENTS," WAC 248-18-719;
- (d) Equipment specified in rule includes only equipment frequently built in or attached to the building;
- (e) WAC section titles describe the category of facilities, requirements, or information to which the contents of that section relates; and
- (f) Except for sections adopted after July 1, 1989, in "NEW CONSTRUCTION REGULATIONS," WAC 248-18-500 through 248-18-719 and WAC 248-18-99902:
- (i) Capital letters designate a requirement or all requirements;
- (ii) Lower case letters designate options, suggestions, recommendations, or explanations;
- (iii) Hospitals including any equipment, area, room, unit, service, or other facility designated in lower case letters (suggested or optional) shall comply with applicable standards in chapter 248–18 WAC;
- (iv) If a WAC title denotes a unit, service, department, or other category of facilities required only under certain circumstances:
- (A) The circumstances are stated following the title; and
- (B) If included, constructed according to applicable rules and standards in chapter 248–18 WAC.
- (v) The words "Optional. SHALL MEET REQUIREMENTS, IF INCLUDED." following a WAC title indicate:

- (A) The particular unit, service, department, or other category of facilities is only recommended and not mandatory; and
- (B) If included, constructed according to applicable rules and standards in chapter 248–18 WAC.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–520, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 89–22–105 (Order 009), § 248–18–515, filed 11/1/89, effective 12/2/89; 88–23–083 (Order 2729), § 248–18–515, filed 11/18/88. Statutory Authority: 1985 c 213. 86–08–002 (Order 2348), § 248–18–515, filed 3/20/86. Statutory Authority: RCW 70.41.30 [70.41.030]. 81–05–029 (Order 209), § 248–18–515, filed 2/18/81; Order 119, § 248–18–515, filed 5/23/75; Order 50, § 248–18–515, filed 12/17/70; Order 22, § 248–18–515, filed 6/27/69; Regulation 18.530, filed 1/25/62.]

WAC 246-318-530 Site and site development. (RE-QUIREMENTS IN CAPITAL LETTERS – SEE WAC 248-18-515.)

- (1) LOCATION.^{2, 3}
- (a) SERVED BY AT LEAST ONE STREET, USABLE UNDER ALL WEATHER CONDITIONS.
- (b) REMOTE FROM INSECT BREEDING AREAS AND FREE FROM OBJECTIONABLE NOISE, SMOKE, DUST, AND ODORS.
 - (c) SERVED BY ADEQUATE UTILITIES.2
- (d) ON HIGH GROUND PROVIDING NATURAL DRAINAGE OR SERVED BY ADEQUATE STORM SEWERS.
- (e) SERVED BY ADEQUATE ORGANIZED FIRE FIGHTING AND POLICE SERVICES.

Sufficiently close to center of community served.

- (2) SIZE.
- (a) ADEQUATE FOR HOSPITAL PLANNED AND NECESSARY SERVICE ROADS AND PARKING.
- (b) SUFFICIENT TO PROVIDE PRIVACY FOR PATIENTS and attractive grounds.

Sufficient for one hundred percent expansion in building area.

Four acres for twenty-five beds, six acres for fifty beds, nine acres for one hundred beds, sixteen acres for two hundred beds are recommended.

- (c) SUFFICIENT FOR PRIVATE SEWAGE DISPOSAL IF THERE IS NO PUBLIC SEWER SYSTEM.
 - (3) PARKING AREA.
- (a) LOCATED FOR CONVENIENCE AND TO AVOID UNDUE DISTURBANCE TO PATIENTS.
- (b) ADEQUATE NUMBER OF PARKING SPACES.

One parking space per bed plus one space per employee for the day shift recommended.

- (c) ADEQUATE DRAINAGE.
- (d) SURFACE TREATED TO MINIMIZE DUST. Illuminated at night.
- (4) DRIVES AND WALKS.
- (a) ADEQUATE FOR MOVEMENT OF PATIENTS, VISITORS, STAFF AND SERVICE VEHICLES.
- (b) CONSTRUCTED FOR USE UNDER ALL WEATHER CONDITIONS.

- (c) LOCATED TO PREVENT CONFLICTING TRAFFIC.
- (d) LOCATED FOR A MINIMUM OF DISTURBANCE TO PATIENTS.
 - (e) SURFACE TREATED TO MINIMIZE DUST. Illuminated at night.
 - (5) ENTRANCES.
- (a) LOCATED FOR A MINIMUM OF DISTURBANCE TO PATIENTS.
- (b) ENTRANCES REQUIRED FOR MOVEMENT OF PATIENTS IN WHEELCHAIRS OR ON STRETCHERS TO BE DESIGNED WITHOUT STAIRS. RAMPS PERMISSIBLE WITH SLOPE NOT EXCEEDING ONE IN TEN. A slope not exceeding one in twenty recommended. AT LEAST ONE ENTRANCE TO THE HOSPITAL TO BE SO DESIGNED.
 - (i) PATIENTS' AND VISITORS' ENTRANCE. ADJACENT TO LOBBY.
 - (ii) Emergency patients' entrance.

REQUIRED IF HOSPITAL HAS AN EMERGENCY DEPARTMENT.

LOCATED FOR READY ACCESS TO EMERGENCY DEPARTMENT.

AT GRADE LEVEL AND READILY ACCESSIBLE TO PEDESTRIAN, AMBULANCE, AND OTHER VEHICULAR TRAFFIC.

AMBULANCE PORT SIZED TO ACCOMMODATE AT LEAST ONE VEHICLE TWENTY-TWO FEET LONG, ONE HUNDRED THIRTY INCHES HIGH AND EIGHT FEET WIDE. AMBULANCE PORT TO BE DESIGNED TO PROTECT AN EMERGENCY PATIENT AND THE INTERIOR OF THE EMERGENCY DEPARTMENT FROM WEATHER WHEN A PATIENT IS BROUGHT FROM AN AMBULANCE OR OTHER VEHICLE INTO THE EMERGENCY DEPARTMENT.

Designed to permit attendants to stand on same level as entrance when removing a stretcher from ambulance.

RAMPS TO BRIDGE ANY DIFFERENCE IN LEVELS OF APPROACH FOR PEDESTRIAN TRAFFIC.

(iii) OUTPATIENT ENTRANCE.

May be combined with entrances for patients and visitors or emergency patients.

LOCATED NEAR OUTPATIENT FACILITIES AND FOR ACCESSIBILITY BY WHEELCHAIR PATIENTS.

- (iv) SERVICE ENTRANCE.
- CLOSE TO STORAGE, ELEVATORS, AND KITCHEN.
 - (v) EXIT FOR REMOVAL OF BODIES.

May be combined with emergency patients' entrance and/or service entrance.

LOCATED WHERE BODIES CAN BE RE-MOVED IN AN UNOBTRUSIVE MANNER.

(vi) Employees' entrance.

Convenient to locker rooms and for control of ingress and egress.

(vii) Doctors' entrance.

Convenient to locker room, records room, and switchboard.

- (6) ORIENTATION OF PATIENT ROOMS.⁴
- (a) ON QUIET SIDE OF SITE.
- (b) LOCATED FOR PRIVACY FOR PATIENTS.
- (c) PROTECTED FROM THE VIEW OF RE-MOVAL OF BODIES, AND STORAGE OF RUBBISH.

Oriented for sunlight and prevailing breezes.

Notes:

²See GENERAL DESIGN REQUIREMENTS, WAC 248–18–719(3), PLUMBING AND SEWERAGE.

³Not applicable to alterations and additions to existing hospitals.

⁴See requirements for "windows," WAC 248-18-719(1) and see WAC 248-18-001 for definition of "grade."

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–530, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.41 RCW. 90–12–014 (Order 061), § 248–18–520, filed 5/30/90, effective 6/30/90. Statutory Authority: RCW 70.41.030 and 43.20.050. 83–19–058 (Order 269), § 248–18–520, filed 9/20/83; Order 119, § 248–18–520, filed 5/33/75; Order 106, § 248–18–520, filed 1/13/75; Regulation 18.540, filed 1/25/62.]

WAC 246-318-540 General design requirements. Hospitals planning new construction shall include the following general design elements for certain rooms or areas required by other sections of this chapter:

(1) Architectural components including:

- (a) Aisles between fixed elements wide enough to allow unimpeded movement of equipment and personnel within rooms or suites meeting requirements under WAC 248-18-99902(19);
- (b) Ceiling heights meeting requirements in Table 719–1, Minimum Clear Opening for Doors and Nominal Ceiling Heights;
- (c) A corridor system established throughout the hospital designed for traffic circulation providing patient privacy and preventing through traffic in examination, observation, treatment, and diagnostic areas, with width:
- (i) Eight feet and restrictions of no more than seven inches for nonambulatory patient areas;
- (ii) Existing seven feet minimum permitted in alteration projects; and
- (iii) Meeting requirements under WAC 248-18-99902 (19) and (20) in all other areas with:
- (A) Five feet for corridors permitted when serving ambulatory patient traffic within a single department; and
- (B) Four feet minimum permitted for nonpatient areas and departments when there is a five-by-five foot turnaround at least every seventy-five feet.
- (d) Handrails on both sides of corridors used by patients on orthopedic units, rehabilitation nursing units, nursing home units, and other long-term nursing units with dimensions as follows:
- (i) Top of the handrail thirty-two to thirty-four inches above the floor;
- (ii) Projecting a maximum of three and one-half inches from wall; and
 - (iii) End of handrail returning to wall.
 - (e) Doors:

- (i) With widths meeting requirements under WAC 248-18-99902(20) and Table 719-1, Minimum Clear Opening for Doors and Nominal Ceiling Heights;
- (ii) Designed to prevent swinging into established corridor widths, except those from small unoccupied spaces, such as small closets;
- (iii) In patient rooms designed to swing to a full, open position;
- (iv) With provision for immediate emergency access to patient toilets, showers, and bathrooms; and
- (v) With vision panels required in all pairs of opposite swinging doors.
- (f) At least one elevator in multi-story hospital designed for patient transport with minimum dimensions of:
 - (i) Five feet four inches inside width;
 - (ii) Eight feet six inches inside length; and
 - (iii) Four feet wide door openings.
 - (g) Stairways and ramps with:
 - (i) Skid-resistant surfaces;
- (ii) Handrails, guardrails, and other safety devices on all stair-wells and ramps meeting requirements under WAC 248-18-99902 (19) and (20);
- (iii) Slope of ramps used for patients not to exceed one unit of vertical rise for every twelve units of horizontal run; and
- (iv) Slope of all other ramps meeting requirements under WAC 248-18-99902(20).
- (h) Construction to control entrance and infestation by pests, such as mammals, birds, and insects;
- (i) Windows in patient rooms, except in labor rooms and nurseries, with:
- (i) A clear glass area of at least one-tenth of the floor space or meeting requirements under WAC 248-18-99902(20);
 - (ii) Location in the outside walls and:
- (A) Twenty feet or more from another building or opposite wall or court;
- (B) Ten feet or more from property line except on street side; and
- (C) Allowance for a satisfactory amount of unobstructed natural light.
- (iii) Location in interior common walls rather than in outside walls only when meeting requirements in WAC 248-18-99902(20);
 - (iv) Sills:
 - (A) No higher than three feet from the floor;
- (B) No higher than four feet from the floor in critical care rooms;
- (C) With exterior grade a minimum of six inches below window sill; and
- (D) With exterior grade sloping away from building for at least ten feet.
 - (v) Sixteen mesh screens on all operable windows.
 - (2) Heating, ventilation, and cooling including:
- (a) A heating system with capacity to maintain a temperature of seventy-five degrees Fahrenheit or more in each room or occupied space;
- (b) A cooling system with capacity to cool patient areas to a temperature of seventy-five degrees Fahrenheit or below;

- (c) Heating and cooling controls with:
- (i) Individual thermostatic control in each patient room; and
- (ii) All other areas suitably zoned and thermostatically controlled consistent with WAC 248-18-99902(2).
- (d) Piping and duct systems insulated to control excessive heat transfer and condensation;
- (e) Air balancing of distribution systems to maintain air changes and pressure relationships meeting requirements in Table 719-3, General Pressure Relationships and Ventilation of Certain Hospital Areas, in this section:
 - (f) Air handling duct system:
- (i) Meeting requirements under WAC 248-18-99902(5);
- (ii) With fiberglass ducts, if installed, of nonerosive wearing surfaces specified under WAC 248-18-99902 (9) and (10); and
- (iii) With fiberglass-lined ducts, if installed, serving sensitive areas with ninety percent efficiency filters installed downstream of the duct lining.
- (g) The use of space above ceilings for exhaust and return plenums restricted to nonclinical and nonpatient care areas, such as administrative, public waiting, and meeting areas;
 - (h) Air supply and exhaust locations:
- (i) Meeting requirements under WAC 248-18-99902 (2) and (8);
- (ii) With outdoor intakes located to the extent practical and possible as follows:
- (A) Directionally different exposures twenty feet or more from:
 - (I) Combustion equipment stacks;
- (II) Ventilation exhaust outlets from the hospital or adjoining buildings including fume hoods and ethylene oxide systems;
 - (III) Medical-surgical vacuum systems;
 - (IV) Plumbing vent stacks; and
- (V) Areas that may collect vehicular exhaust and other noxious fumes.
- (B) Bottom of intake six feet or more above ground level or three feet or more above roof level specified under WAC 248-18-99902(2).
- (iii) Exhaust air discharge located to avoid cross circulation to supply air intakes or operable windows.
- (i) Filters installed in central ventilation or air conditioning systems with:
- (i) Filter beds and filter efficiencies meeting requirements under Table 719-4, Ventilation and Air Conditioning Systems: Filter Efficiencies in Hospitals;
- (ii) Filter bed No. 2 downstream of the last component of any central air handling unit except:
- (A) Steam injection-type humidifier permitted downstream of filter bed No. 2;
- (B) Terminal reheat coils permitted downstream of filter bed No. 2; and
- (C) Terminal cooling coils permitted downstream of filter bed No. 2 with additional filtration downstream of coil meeting requirements of filter bed No. 2.
- (iii) Filter frames tight to the enclosing duct work; and

- (iv) A manometer or equivalent installed across each filter bed serving sensitive areas of central air systems.
- (j) Fire shutdown in accordance with WAC 248-18-99902 (5) and (25).
- (k) Exhaust hoods or other approved exhaust devices over equipment likely to produce excessive heat, moisture, odors, or contaminants, and properly designed for intended use.
- (l) Laboratory hoods for handling infectious materials meeting requirements under WAC 248-18-99902(7) with:
- (i) A minimum face velocity of seventy-five feet per minute at maximum operating level of sash;
- (ii) Served by independent exhaust system with the exhaust fan located at the discharge end of the system;
- (iii) Duct with welded joints or equivalent from the hood to filter enclosure;
- (iv) Filters with 99.97 percent efficiency dioctylphthalate (DOP) test method in the exhaust stream; and
- (v) Designed and equipped to permit the safe removal of contaminated filters.
- (m) Laboratory hood for venting radioactive particulate aerosols with:
- (i) A minimum face velocity of one hundred feet per minute at a maximum operating level of sash;
- (ii) An independent exhaust system with an exhaust fan at the discharge end of the system;
- (iii) Ducts with welded joints or equivalent from the hood to the filter enclosure;
- (iv) Exhaust stream filters with 99.97 percent efficiency using the dioctyl-phthalate (DOP) test method;
- (v) Designed and equipped for the safe removal of contaminated filters; and
 - (vi) Provisions for washdown.
- (n) Laboratory hoods for processing strong oxidizing agents with:
- (i) A minimum face velocity of one hundred feet per minute at maximum operating level of sash;
- (ii) An independent exhaust system and explosionproof exhaust fan at the discharge end of the system;
- (iii) Ducts of welded stainless steel or equivalent throughout the exhaust system; and
- (iv) Hood and exhaust duct system equipped with complete coverage washdown facilities.
 - (o) Noncentral supply ventilation systems:
- (i) Serving sensitive areas meeting the filtering requirements for central systems under Table 719-4, Ventilation and Air Conditioning Systems: Filter Efficiencies in Hospitals; and
- (ii) In other areas with outdoor air for individual rooms and units meeting filtering requirements for central systems under Table 719–4, Ventilation and Air Conditioning Systems: Filter Efficiencies in Hospitals.
 - (p) Equipment to provide relative humidity as follows:
- (i) Forty percent minimum to sixty percent maximum at seventy-two degrees Fahrenheit in:
 - (A) Operating rooms;
 - (B) Delivery rooms;
 - (C) Special procedure rooms;
 - (D) Anesthetizing locations;

- (E) Critical care patient rooms, such as intensive and coronary care; and
 - (F) Recovery rooms.
- (ii) Forty percent minimum to sixty percent maximum at seventy-five degrees Fahrenheit in all nursery facilities.
 - (3) Plumbing components including:
- (a) Design and installation meeting requirements under:
 - (i) WAC 248-18-99902 (3) and (21); and
- (ii) WAC 248-18-99902(19) when rooms and areas are designated for use by the handicapped.
- (b) Backflow prevention device on water supply and plumbing fixtures meeting requirements under WAC 248-18-99902 (3) and (21);
- (c) Trap primers in floor drains and stand pipes subject to infrequent use meeting requirements under WAC 248-18-99902(3);
- (d) Lavatories in each toilet room except where provided in connecting patient room, dressing or locker room:
 - (e) Skid-resistant floor surfaces in tubs and showers;
- (f) Wrist, knee, or foot faucet controls or equivalent and gooseneck spouts:
 - (i) On lavatories in patient rooms;
- (ii) In toilet rooms adjoining patient rooms except those for psychiatric patients per program requirements; and
- (iii) On all lavatories and sinks for personnel use where required to control cross infection, unless the fixture is used for soiled functions only and another sink equipped with appropriate controls is located in the same area of the room.
- (g) Foot, knee, or equivalent faucet controls and gooseneck spouts on lavatories and scrub sinks in:
 - (i) All nursery rooms;
 - (ii) Birthing rooms;
 - (iii) Surgery and delivery; and
 - (iv) Other sensitive areas.
- (h) Drinking fountains or equivalent at suitable locations, with at least one on each floor;
 - (i) Insulation installed on:
- (i) Hot water piping systems as required to control excessive heat transfer and to provide safety;
- (ii) Cold water and drainage piping as required to control condensation; and
- (iii) Piping exposed to outside temperatures, designed to prevent freezing.
- (j) Hot water supply meeting requirements under WAC 248-18-99902 (2) and (21);
- (k) Equipment to deliver hot water at temperatures measured at point of use as follows:
- (i) One hundred sixty degrees Fahrenheit or more for laundry;
- (ii) One hundred twenty degrees Fahrenheit or more for mechanical dishwashers and laundry washers using chemical sanitization:
- (iii) One hundred fifty degrees Fahrenheit or more for high temperature sanitization dishwashers; and
- (iv) One hundred twenty degrees Fahrenheit or less at patient sinks, lavatories, and bathing facilities.

- (1) Sewage disposal systems meeting requirements under WAC 248-18-99902 (22) and (23);
 - (m) Vacuum and medical gas systems:
- (i) Installed and tested to meet requirements under WAC 248-18-99902 (4) and (11); and
- (ii) Located to meet requirements under Table 719-2, Medical Gases, Vacuum, and Waste Gas Evacuation.
 - (n) Waste gas evacuation system:
- (i) Installed and tested to meet requirements under WAC 248-18-99902(24); and
- (ii) Located to meet requirements under Table 719-2, Medical Gases, Vacuum, and Waste Gas Evacuation.
 - (4) Electrical requirements including:
 - (a) General electrical service as follows:
- (i) Electrical receptacle outlets meeting requirements under Table 719-5, Single Electrical Receptacle Outlet Requirements;
- (ii) Capacity limited to twelve single electrical receptacle outlets or six duplex electrical receptacle outlets, or equivalent, per twenty amp circuit in all inpatient or outpatient care areas; and
- (iii) Convenience electrical receptacle outlets to accommodate cleaning equipment and accessories such as floor polishers, vacuums, and televisions.
- (b) Electrical service in critical care units and areas as follows:
- (i) Dedicated circuits to serve designated electrical receptacle outlets located at the head of each bed;
- (ii) Capacity limited to six single electrical receptacle outlets or three duplex electrical receptacle outlets or equivalent per twenty amp circuit; and
- (iii) Branch circuit panels located within the area providing ready accessibility to circuit breakers for staff.
 - (c) Emergency electrical service with:
- (i) Critical emergency power electrical receptacle outlets meeting requirements under Table 719–5, Single Electrical Receptacle Outlet Requirements; and
- (ii) Additional emergency power and lighting meeting requirements under WAC 248-18-99902(13).
 - (d) Lighting with:
- (i) Fixtures of the number, type, and location to provide adequate illumination for the functions of each area meeting requirements under WAC 248-18-99902(12);
- (ii) A reading light and control conveniently located for use by the patient at each bed in the patient rooms;
- (iii) Protective lens or diffusers on overhead light fixtures;
- (iv) Night light for each bed located below the level of the bed to dimly light pathway in the room;
- (v) Night light switches and general illumination switches located adjacent to the opening side of patient room doors, except psychiatric patient security and seclusion rooms, where switches are located outside of the rooms; and
- (vi) Lighting fixtures in psychiatric security and seclusion rooms of tamper-resistant design.
 - (e) Electrical/electronic equipment including:
- (i) Call systems meeting requirements under Table 719-6, Call Systems;
- (ii) Annunciator at control point of department or unit and additional staff duty stations such as utility,

medication, and nourishment rooms and staff lounges; and

- (iii) Film illuminators, or equivalent, accommodating at least two x-ray films in all areas where films are viewed, except in private offices.
 - (5) Interior finishes with:
- (a) Floor finishes suitable to the function of each area and:
 - (i) Easily cleanable;
- (ii) Skid-resistant material at entrances and other areas used while wet; and
- (iii) Coved base integral with floors or top set base with toe tight to the walls.
 - (b) Carpets, if installed, of:
 - (i) Easily cleanable material;
 - (ii) Construction to prevent or reduce static build-up;
 - (iii) Finish classification with a:
- (A) Radiant panel test class I, a minimum flux of 0.45 watts per centimeter squared; and
- (B) Smoke density test class A, 450 or less on the smoke test scale.
- (iv) Average pile density of 4,000 ounces per cubic yard calculated by:

Yarn weight (ounces

per square yard) X 36 = Average pile density (ounces per cubic yard);

- (v) Maximum pile height of .312 inches;
- (vi) Padding, if used, that is water resistant and permanently bonded to the carpet backing;
 - (vii) Cemented to the floor; and
- (viii) Edges covered and top set base with toe at all wall junctures.
- (c) Ceiling finishes or construction suitable to the functions of each area with:
- (i) Monolithic or bonded construction for ceilings in patient rooms of psychiatric nursing units, security and seclusion rooms;
- (ii) Concealed duct work and piping in occupied spaces;
 - (iii) Easily cleanable;
- (iv) Smooth finish without visible joints or crevices in areas where surgical asepsis must be maintained, such as operating rooms, delivery rooms, and emergency treatment rooms;
- (v) Finished to minimize glare in patient rooms, labor rooms, birthing rooms, operating rooms, delivery rooms, and emergency treatment rooms; and
- (vi) Finished to minimize reflection of ultraviolet radiation when ultraviolet radiation generators are used.
- (d) Wall finishes suitable to the functions of each area meeting requirements under WAC 248-18-99902(20) which are:
 - (i) Protected from impact in high traffic areas;
 - (ii) Easily cleanable;
- (iii) Smooth finish without open joints or crevices in areas where surgical asepsis must be maintained, such as operating rooms, delivery rooms, and emergency treatment rooms;
- (iv) Finished to minimize glare in patient rooms and labor rooms;

- (v) Water-resistant paint, glaze, or similar water-resistant finish extending above the splash line in all rooms or areas subject to splash or spray; and
- (vi) Protected by corner guards on external angles to resist impact in areas of heavy traffic.
- (e) Safety of occupants assured during installation or application with room or area:
 - (i) Well-ventilated;
 - (ii) Unoccupied; and
- (iii) Unavailable for use until the room or area is free of volatile fumes and odors.
 - (6) Accessories for bathroom and toilet rooms with:
 - (a) Backing to support the mounting of all accessories;
 - (b) Special requirements for accessories as follows:
- (i) At bathing facilities, water closets, dressing rooms, and examination rooms, except in psychiatric unit:
 - (A) Toilet paper holder at water closets;
 - (B) Towel bar, hook, or ring; and
 - (C) Robe hook.
- (ii) Suitable shelving or equivalent with a mirror at each lavatory in:
 - (A) Toilet room,
 - (B) Patient room,
 - (C) Birthing room,
 - (D) Dressing room, and
 - (E) Locker room.
- (iii) Provision of dispensers for single-use towels or equivalent at all lavatories and sinks mounted to avoid contamination from splash and spray;
- (iv) Provision for soap at each lavatory, sink, and bathing facility; and
 - (v) Grab bars as follows:
- (A) Meeting the requirements under WAC 248-18-99902(19);
- (B) Easily cleanable, resistant to corrosion, functionally designed, securely mounted;
- (C) On two sides of each standard bathtub and shower; and
- (D) At least one horizontal grab bar extended eighteen inches or more in front of the water closet.
- (c) Accessories in bathing and toilet rooms designated for the handicapped meeting requirements under WAC 248–18–99902(19).
 - (7) Signage for identification of:
 - (a) Rooms and spaces; and
- (b) Electric panel boards meeting requirements under WAC 248-18-99902(13).

TABLE 719–1 MINIMUM CLEAR OPENING FOR DOORS AND NOMINAL CEILING HEIGHTS

	MINIMUM CLEAR OPENING FOR NOMINAL					
AREA/ROOM NAME	DOORS	CEILING HEIGHT				
Anesthetizing and Spo	ecial:					
Delivery	3'-10"	9'-0"				
Fracture	3'-10"	8'-0"				
Recovery	3'-10"	8'-0"				
Surgery	3'-10"	9'-0"				
	3'-10"	9'_0"				

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TABLE 719-1 MINIMUM CLEAR OPENING FOR DOORS AND NOMINAL CEILING HEIGHTS

TABLE 719–1 MINIMUM CLEAR OPENING FOR DOORS AND NOMINAL CEILING HEIGHTS

(1990 Ed.)

AREA/ROOM NAME	MINIMUM CLEAR OPENING FOR DOORS CE	NOMINAL ILING HEIGHT	AREA/ROOM NAME	MINIMUM CLEAR OPENING FOR DOORS C	NOMINAL CEILING HEIGHT
Critical Care:			Nuclear medicine X-ray	3'-10" 3'-10"	8'-0" 8'-0"
Intensive care	3'-10"	8'-0"	Diagnostic and treatmen	ıt:	
Nursing: Birthing Nurseries, all Patient	3'-10" (1) 3'-10" (1) 3'-10" (1)	8'-0" 8'-0" 8'-0"	Physical treatment th General: Bathrooms and toilets	nerapy 3'-10" (1)	8'-0" 7'-6"
Radiology and Imaging:					
Computerized tomography scan Radiation therapy Fluoroscopy	3'-10" 3'-10" 3'-10"	8'-0" 9'-0" 8'-0"	NOTES: (1) Existing 3'-8" clear ope (2) Existing 2'-6" clear ope in nursing home rehabili	ning door permitted	4

TABLE 719–2 MEDICAL GASES, VACUUM, AND WASTE GAS EVACUATION

	MEDICAL GASES					
AREA/ROOM NAME	OXYGEN	MEDICAL AIR	NITROUS OXIDE	VACUUM	WASTE GAS EVACU- ATION 1	
Anesthetizing and Special:						
Cystoscopic	D	\mathbf{E}		D		
Delivery	B,G	A,G	A	D,G	. E	
Operating	В	Α	Α	D,H	E	
Operating patient hold area	В			В		
Recovery	В	A-Infants Only		С	,	
Recovery (delivery)	A,G	G		B,G		
Special procedures	Ď	\mathbf{E}	Α	D	E	
Trauma	D	E		D	E	
Critical Care:						
Coronary care	В	В		C		
Intensive care	В	В		C		
Nursing:						
Birthing (Labor, Delivery						
and Recovery)	Α			В		
Examination, treatment	Α			Α		
Labor	В			В		
Nursery:						
Intermediate care	\mathbf{F}	\mathbf{F}		G		
Neonatal intensive care	F	F		G		
Newborn	Α			Á		
Patient:						
Medical, surgical						
and obstetrical	В			В		
Outpatient	В	ъ		В		
Pediatrics	В	В		В		
Radiology and Imaging:						
Imaging services	В			В		
Diagnostic and Treatment:						

TABLE 719–2 MEDICAL GASES, VACUUM, AND WASTE GAS EVACUATION

	MEDICAL GASES					W. Corp. G. C	
AREA/ROOM NAME		OXYGEN	MEDICAL AIR	NITROUS OXIDE	VACUUM	WASTE GAS EVACU- ATION _I	
Autopsy					E		
Emergency treatment		A	Е		E	E	

NOTES:

- One outlet accessible to each bed, stretcher, bassinet, or equivalent; one outlet may serve two beds or two bassinets.
- Separate outlet for each bed, stretcher, bassinet, or equivalent.
- Two outlets for each bed.
- D Two outlets per room intended for one patient at any one time.
- One outlet per room.
 Two outlets per station. E
- G Separate outlets for infants.
- H If used for delivery, must include G.
- I Required only when general anesthesia is used.

TABLE 719-3 GENERAL PRESSURE RELATIONSHIPS AND VENTILATION OF CERTAIN HOSPITAL AREAS

area/Room Name	Pressure Relation— Ship To Adjacent Areas	Minimum Air Changes Of Outdoor Air Per Hour Supplied To Room	Minimum Total Air Changes Per Hour Supplied To Room	All Air Exhausted Directly To Outdoors	Recir—culated Within Room Units
NESTHETIZING AND SPECIAL:					
Operating and obstetrical delivery (recirculating air system)	P	3	15	Optional	No^1
Operating and obstetrical delivery (all outdoor air system) ⁶	P	15	15	Yes	No
Recovery	P	2	6	Optional	No^1
Trauma ²	P	3	15	Optional	No ¹
RITICAL CARE:					
Intensive care	. P	2	6	Optional	No
URSING:					
Birthing	P	2	2	Optional	No^1
Nursery, newborn	P	2	6	Optional	No
Patient	NA	2	2	Optional	Optional
Patient Corridor	NA	2	4	Optional	Optional
Patient isolation ³	P or N	2	6	Yes	No
Patient isolation alcove or anteroom ³	P or N	2	10	Yes	No
Patient toilet	N	Optional	10	Yes	No
ADIOLOGY AND IMAGING:					
Darkroom	N	2	10	Optional	No
X–ray	NA	2	6	Optional	Optional
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TABLE 719–3 GENERAL PRESSURE RELATIONSHIPS AND VENTILATION OF CERTAIN HOSPITAL AREAS

Area/Room Name			Minimum Air Changes Of Outdoor Air Per Hour Supplied To Room	Minimum Total Air Changes Per Hour Supplied To Room	All Air Exhausted Directly To Outdoors	Recir– culated Within Room Units
DIAGNOSTIC AND TREATMENT:						
Autopsy		N	2	12	Yes	No
Body holding, nonrefrigerated ⁴		N	Optional	10	Yes	No
Examination		NA N or P	2	6	Optional	Optional
Medication		P	2	4	Optional	Optional
Nuclear medicine		N	2	6	Yes	No
Pharmacy		P	2	4	Optional	Optional
Physical therapy and		N	2	6	Optional	Optional
hydrotherapy						
Treatment		ÑA	2	6	Optional	Optional
ABORATORY:						
Bacteriology		N	2	6	Yes	No
Biochemistry		P	2	6	Optional	No
Cytology		N	2	6	Yes	No
Glass washing		N	2	10	Yes	Optional
Histology		N	2	6	Yes	No
Media transfer		P	2	4	Optional	No^2
Pathology		N	2	6	Yes	No
Serology		P	2	6	Optional	No
Sterilizing		N	Optional	10	Yes	No
ENTRAL SERVICE:						
Clean workroom and		P	2	4	Optional	Optional
sterile storage Equipment storage		NA	2 (Optional) 2	Optional	Optional
ETO sterilizer ⁷		1 42 %	2 (Optional) 2	Optionar	Optional
Sterilizer equipment		N	Optional	10	Yes	No
ITCHEN AND DIETARY:						
Dietary day storage		NA	Optional	2	Optional	No
Food preparation centers ⁵		NA	2	10	Yes	No
Ware washing	•	N	Optional	10	Yes	No
ENERAL:						
Bathroom		N	Optional	10	Yes	No
Bedpan		N	Optional	10	Yes	No
Janitors closet		N	Optional	10	Yes	No
Utility, clean		P	2	4	Optional	Optional
Utility, soiled		N	2	10	Yes	No

ABBREVIATIONS:

P = Positive

N = Negative

NA = Not Applicable (Continuous Direction Control Not Required)

NOTES:

- 1 Recirculating room units meeting the filtering requirements for the space may be used.
- 2 The term "trauma room" used in Table 719-3 is the operating room space in the trauma center routinely used for emergency surgery. The first aid room and/or "emergency room" used for general initial treatment of accident victims may be ventilated as noted for the "treatment room."
- 3 The isolation rooms described in the standards might be used in the average community hospital. The assumption is the isolation procedures will be for infectious patients and the room should also be suitable for normal private patient use when not needed for isolation.
- 4 The nonrefrigerated body-holding room would be applicable only for facilities not performing autopsies on site and using the space for a short period while waiting for body transfer to be completed.
- 5 Food preparation centers shall have ventilation systems with an excess of air supply for positive pressure when hoods are not in operation.
- 6 The number of air changes may be reduced when areas are not occupied.
- 7 See WAC 248-18-99902 (15) and (28).

TABLE 719-4 VENTILATION AND AIR CONDITIONING SYSTEMS FILTER EFFICIENCIES IN HOSPITALS

AREA/ROOM NAME	FILTER BED 1	FILTER BED 2 %					
Anesthetizing and Special:							
Operating and d	elivery 25	90					
Organ transplan		90 (A)					

TABLE 719–4 VENTILATION AND AIR CONDITIONING SYSTEMS FILTER EFFICIENCIES IN HOSPITALS

	FILTER BED 1F	
AREA/ROOM NAME	%	%
Recovery	25	90
Special procedure	s 25	90
Critical Care:		
Intensive and CC	U 25	90
Nursing:		
Birthing	25	90 (B)
Labor	25	90 (B)
Nursery, newborn	25	90
Patient	25	90 (B)
Patient treatment	25	90 (B)
Postpartum	25	90 (B)
Radiology and Imagin	g:	
X-Ray	25	90 (B)
Fluoroscopy	25	90 (B)
Laundry:	80	NA
Kitchen and Dietary:		
Food preparation	80	NA
Storage, bulk	25	NA
General:		
Administration	25	NA
Utility, soiled	25	NA

NOTES:

- (A) 99.9% recirculating air.
- (B) 80% acceptable with total outside air.
- NA Not applicable.

TABLE 719–5 PATIENT CARE AREA SINGLE ELECTRICAL RECEPTACLE OUTLET REQUIREMENTS

AREA/ROOM NAME	LOCATION IN ROOM (*ACCORDING TO PROGRAM UNLESS OTHERWISE STATED)	TOTAL	CRITICAL EMER- GENCY POWER	SPECIAL REQUIREMENTS (*HOSPITAL GRADE)
ANESTHETIZING AND SPECIAL:				
Delivery	*	12	12	*
Trauma	*	6	6	*
Patient holding	*	4	4	*
Operating	*	12	12	*
Recovery	Head of each bed	4	4	*
Special procedures	*	. 12	12	*
CRITICAL CARE:				
Intensive care and other	Head of each bed	12	12	*
(1990 Ed.)				[Title 246 WAC—p 44

TABLE 719-5 PATIENT CARE AREA SINGLE ELECTRICAL RECEPTACLE OUTLET REQUIREMENTS

ARE	A/ROOM NAME	LOCATION IN ROOM (*ACCORDING TO PROGRAM UNLESS OTHERWISE STATED		CRITICAL EMER- GENCY POWER	SPECIAL REQUIREMENTS (*HOSPITAL GRADE)	
NUF	SING:					
	Birthing and LDR	* for woma and infant	n 6	2	*	
	Nursery	Between every two bassinets and *		. 4		
	Nursery, intermediate care	Each station and *	6	6	*	
	Nursery, neonatal intensive care	Each station and *	12	12	*	
	Pediatric	Head of bed	4	2	Tamper— resistant safety receptacles	
	Pediatric critical care	Head of bed and *	12	12	*	
	Psychiatric	Head of bed	2	0	Tamper— resistant safety receptacles	
IA	GNOSTIC AND TREATMENT:					
	Emergency examination Emergency, minor Physical therapy Occupational therapy Radiology and imaging	One per wall One per wall * *		4 6 (B)	* *	
A ID	ORATORY:		(C)			
		*				
	General Critical equipment	*	2	2	(D)	
EN	ERAL:					
	Patient lavatories Other lavatories All bathing facilities		2 0 0	0 0 0	(E) (E) (E)	
TOP	ES:			TABLE		
(A)	Per treatment area sufficient to suppment activities.	port diagnostic and treat-		CALL SY		-
B)	Ground fault circuit interrupter when i wet areas.	nstalled within five feet of	AREA/ROOM NAME	TYPE	INITIATION INDICATOR INDICA LOCATION TYPE LOCAT	
C)	Sufficient to support diagnostic and tre	eatment.	ANESTHETIZING AN		<u></u>	
D)	With grounding conductor and dedicat each piece of equipment and sufficient		Delivery Trauma Operating	MES MES MES	H E E H,A E E H E C	
(E)	When installed within five feet of lavaties, ground fault circuit interrupter red		Patient holding Patient induction Recovery station	area PNC n PNC MES	A B B B H E E A G C	

TABLE 719-6 CALL SYSTEMS

AREA/ROOM NAME	SYSTEM TYPE					
CRITICAL CARE:						
Intensive and	PNC	Α	В	В		
coronary care	MES	H,A	Ē	E		
NURSING:						
Birthing	PNC	Α	В	В .		
Diffillig	MES	A,H	E	E		
Labor	PNC	A	В	B		
Luboi	MES	H	Ē	Ē		
Nursery, neonatal	IVELO		L	L		
intensive care	MES	Н	Е	Е		
Nursery, intermediate		••		L		
care	MES	Н	Е	E		
Nursery, newborn	MES	H	Ē	Ē		
Nurses station	MLD		nnunciat			
runses station		4	panel for			
		ĭ	PNC/ME			
Patient dressing	PNC	F.	B,D	В		
Patient	PNC	Â	В	B		
Patient shower,	1110			-		
bathroom and toilet	PNC	F	B,D	В		
Psychiatric activity	MES	H,I,C	C	~		
Psychiatric patient	MES	H	č			
Psychiatric seclusion	MES	H	Č			
RADIOLOGY AND IMAGIN	G:					
				_		
X-ray, Fluoroscopy	MES	Н	Е	E		
DIAGNOSTIC AND TREATM	TENT:					
Emergency exam	PNC	Α	В	С		
Emergency cham	MES	H	Ē	E		
Minor treatment	PNC	Α	B,C	B,C		
	MES	Н	É	É		
Nuclear medicine	MES	Н	Е	E		
Physical therapy	PNC	I	B,C	B,C		
J F J	MES	Н	É	É.		
Occupational						
therapy	MES	Н	E	E		
GENERAL:						
Emergency entrance	Doorbell	Outside	AS/VI	At a 24-		
Zinorgone, entrance	_ 001 0011	hospital		hour moni-		
		door		tored duty		
				station		
Utilities	AS/VL		AS/VL	Duty		
	, - =		,	station		

ABBREVIATIONS:

PNC = Patient nurse call

MES = Medical emergency signal

AS = Audible signal

VL = Visual light

NOTES:

A Head of bed.

- B Register by light at corridor door or treatment area and register by light and audible signal at the nurses' station and duty stations.
- C Call signals initiated by staff within a department by remote or other means to register at a staff control point from which assistance is always available.

- D Signals from toilets and bathing facilities to have distinctive light and distinctive audible signals.
- E Medical emergency system devices to register by distinctive light at the corridor door. Nurses' station annunciator or equivalent shall identify point of origin by a distinctive light and distinctive audible signal. Signal device to be reset only by staff at the point of origin. Distinctive visual and distinctive audible signals at locations from which additional staff assistance is always available.
- F A properly located signal device mounted no higher than six feet above the floor and activated by a nonconductive pull cord within easy grasp by a patient slumped forward on the floors of either the toilet, bathing facility, or dressing room.
- G Register by light and outside each patient station or register by light and audible signal at the nurses' station.
- H Properly located signal device within easy reach by staff.
- I Any area not within direct observation.
- J May be integrated with other systems.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–540, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.41 RCW. 90–12–014 (Order 061), § 248–18–719, filed 5/30/90, effective 6/30/90. Statutory Authority: RCW 70.41.030. 89–22–105 (Order 009), § 248–18–719, filed 11/1/89, effective 12/2/89.]

WAC 246-318-550 General requirements for service facilities. General requirements for service facilities constructed in certain rooms and areas required by other sections of these rules as follows:

- (1) General design requirements for architectural components, electrical service, lighting, call systems, hardware, interior finishes, heating, plumbing, sewerage, ventilation/air conditioning, and signage meeting requirements under WAC 248–18–719;
- (2) At least one cleaning facility for carts and large equipment with the floor drain connected to a sanitary sewerage system;
- (3) Each clean materials room considered part of a system for storage and distribution of clean and sterile supplies and materials, with sufficient space for parking of clean supply carts;
 - (4) Each clean utility room with:
 - (a) Work counter;
 - (b) Sink or lavatory;
 - (c) Enclosed and open storage; and
- (d) Dispensers or equivalent for towels and liquid detergent.
- (5) Each clean—up room for the surgery or delivery suite, or equivalent, separate from the clean materials room or clean utility room, with:
 - (a) A clinic service sink;
 - (b) Work counter;
 - (c) Adequate storage space; and
- (d) A double-compartment sink integral with the counter and space on either side to accommodate equipment and materials to be cleaned.
 - (6) Each housekeeping supply room with:
 - (a) A service sink or equivalent;
 - (b) Soap and towel dispenser or equivalent;
 - (c) Mop rack; and
 - (d) Storage area.
- (7) Each medicine distribution facility, if planned, in a room designed to minimize traffic, with:

- (a) Lavatory;
- (b) Working surface, either on a cart or counter;
- (c) Lockable drug storage;
- (d) Enclosed cabinet or equivalent for storage;
- (e) Storage space for the medicine cart; and
- (f) Space and electrical receptacle for a refrigerator.
- (8) Each soiled materials room with:
- (a) A clinic service sink unless:
- (i) A toilet containing bedpan flushing attachment adjoins each patient room; or
 - (ii) A soiled utility room is on the same nursing unit.
- (b) Space for waste container, linen hampers, carts, and other large equipment; and
 - (c) Handwashing sink or equivalent.
 - (9) Each soiled utility room with:
- (a) A double-compartment sink to accommodate equipment to be cleaned;
- (b) A three-foot long work surface which may be moveable;
- (c) Storage cabinets sufficient to store cleaning supplies;
- (d) Clinic service sink with bedpan flushing attachment; and
- (e) Space for waste containers, linen hampers, and other large equipment.
 - (10) Each storage room with:
- (a) Arrangement to separate clean and sterile supplies and equipment from used or soiled items;
- (b) Enclosed storage units or carts or shelves, or drawers for clean and sterile supplies, unless provided in a clean utility room under WAC 248-18-711(4);
- (c) Storage for large nursing and medical patient care equipment; and
- (d) Shared use by one or more adjacent units or areas permitted.
- (11) Alcove space in corridor permitted to accommodate equipment such as stretchers, wheelchairs, walkers, and lifts.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-550, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 89-22-105 (Order 009), § 248-18-711, filed 11/1/89, effective 12/2/89.]

WAC 246-318-560 Maintenance and mechanical facilities. (REQUIREMENTS IN CAPITAL LETTERS - SEE WAC 248-18-515.)

(1) BOILER AND/OR MECHANICAL EQUIPMENT ROOMS. 35

INSULATED, SOUND DEADENED, AND MECHANICALLY VENTILATED TO MINIMIZE TRANSFER OF HEAT AND NOISE TO ROOMS OCCUPIED BY PATIENTS AND EMPLOYEES. Not required if location of rooms precludes necessity.

- (2) Maintenance shop.
- (a) LOCATED FOR A MINIMUM OF NOISE AND DUST TO THE REST OF THE HOSPITAL.
- (b) LOCATED AND DESIGNED FOR EASY DELIVERY AND REMOVAL OF EQUIPMENT.

Note:

³⁵See GENERAL DESIGN REQUIREMENTS, WAC 248–18–719.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–560, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.41 RCW. 90–12–014 (Order 061), § 248–18–705, filed 5/30/90, effective 6/30/90; Order 119, § 248–18–705, filed 5/23/75; Regulation 18.750, filed 1/25/62.]

WAC 246-318-570 Administrative facilities. (RE-QUIREMENTS IN CAPITAL LETTERS – SEE WAC 248-18-515.)

- (1) LOBBY.
- (a) WAITING SPACE.
- (b) WHEELCHAIR PARKING.
- (c) PUBLIC TOILETS FOR EACH SEX.
- (d) PUBLIC TELEPHONE.
- (e) INFORMATION COUNTER.

Provision for sale of newspapers, soft drinks, gifts, cigarettes, etc.

- (2) ADMITTING FACILITIES.
- (a) PROVISION FOR AUDITORY PRIVACY DURING INTERVIEW.
 - (b) Interview rooms.
 - (c) Vault for patient valuables.
 - (d) Routine examination facilities.
 - (3) ADMINISTRATION FACILITIES.
 - (a) OFFICE FOR ADMINISTRATOR.
- (b) OFFICE FOR DIRECTOR OF NURSING IF OVER TWENTY–FIVE BEDS.
 - (c) Offices for other administrative personnel.
 - (d) Secretarial office space.
 - (e) Board room.
- (4) BUSINESS OFFICE. Vault for records, cash, etc.
- (5) MEDICAL RECORDS FACILITIES.
- (a) ACTIVE RECORDS STORAGE. SPACE FOR FIFTY INPATIENT RECORDS PER BED PER YEAR, NOT LESS THAN THREE SQUARE FEET FLOOR SPACE PER BED.
- (b) ADDITIONAL SPACE FOR OUTPATIENT RECORDS.
 - (c) INACTIVE RECORDS STORAGE.
- (i) SPACE FOR FIFTY INPATIENT RECORDS PER BED PER YEAR.
- (ii) TOTAL SPACE DEPENDENT UPON DURATION AND TYPE OF STORAGE PLANNED.
 - (iii) Doctors' dictation facilities.
 - (iv) Transcribing facilities.
 - (6) MEDICAL STAFF FACILITIES.
 - (a) Doctors' in-and-out register.
 - (b) COAT ROOM.
 - (c) Toilet.
 - (d) Medical lounge and library.
 - (7) HOSPITAL EMPLOYEE FACILITIES.
- (a) LOCKER ROOMS, and lounges. ADEQUATE TO ACCOMMODATE ALL EMPLOYEES NOT PROVIDED ADEQUATE FACILITIES IN INDIVIDUAL DEPARTMENTS.
 - (i) SEPARATE FOR MEN AND WOMEN.
 - (ii) SPACE FOR INDIVIDUAL LOCKERS.
- (b) TOILETS. ADEQUATE TOILETS ADJOINING EACH LOCKER ROOM. ADDITIONAL EMPLOYEES' TOILETS THROUGHOUT THE

HOSPITAL TO ADEQUATELY SERVE EMPLOY-EES OF ALL DEPARTMENTS.

- (c) Showers Adjoining locker rooms.
- (8) Conference and training facilities.
- (9) Retiring room.
- (10) Social service office.
- (11) HOUSEKEEPING FACILITIES⁵

Suitable combination with other housekeeping facilities permitted if convenient to administration facilities.

Note

⁵See GENERAL REQUIREMENTS FOR SERVICE FACILITIES, WAC 248–18–711(6), HOUSEKEEPING FACILITIES.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–570, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.41 RCW. 90–12–014 (Order 061), § 248–18–525, filed 5/30/90, effective 6/30/90. Statutory Authority: RCW 70.41.030 and 43.20.050. 83–19–058 (Order 269), § 248–18–525, filed 9/20/83; Order 119, § 248–18–525, filed 5/23/75; Regulation 18.550, filed 1/25/62.]

WAC 246-318-580 Receiving, storage and distribution. (REQUIREMENTS IN CAPITAL LETTERS – SEE WAC 248-18-515.)

- (1) CENTRAL STORAGE FACILITIES, IN ADDITION TO THE SUPPLY FACILITIES IN INDIVIDUAL DEPARTMENTS, SHALL BE PROVIDED.
- (2) AT LEAST TWENTY SQUARE FEET FLOOR AREA STORAGE PER BED OR EQUIVALENT.²⁴
 - (3) OFFICE.
 - (4) GENERAL STORAGE SHALL:
- (a) BE DESIGNED AND LOCATED FOR MINIMUM DISTURBANCE TO THE OPERATION OF THE HOSPITAL.
- (b) BE LOCATED TO PREVENT CONTAMINATION OR DAMAGE DURING MOVEMENT OF GOODS TO AND FROM STORAGE.
- (c) BE DESIGNED AND CONSTRUCTED TO PREVENT ENTRANCE AND HARBORAGE OF RODENTS AND INSECTS, AND SPOILAGE, CONTAMINATION, AND CORROSION OF GOODS STORED THEREIN.
- (d) PROVIDE FOR PROTECTION AGAINST IN-CLEMENT WEATHER DURING TRANSFER OF SUPPLIES WHEN GENERAL STORAGE FACILI-TIES ARE LOCATED IN SEPARATE BUILDING.
- (e) If pharmaceuticals are stored, PROVIDE SECURED SPACES WITH APPROPRIATE ENVIRONMENTAL CONDITIONS AS APPROVED BY DIRECTOR OF HOSPITAL PHARMACY²⁴ AND IN ACCORDANCE WITH FEDERAL AND STATE LAWS AND RULES ON DRUG STORAGE.
 - (5) RECEIVING AREA OR AREAS.
- (a) UNLOADING FACILITIES LOCATED TO PROVIDE PROTECTION FOR SUPPLIES AND TO PREVENT AUTOMOTIVE EXHAUST FROM ENTERING AIR INTAKES OF HOSPITAL.²⁴ Offstreet, raised platform at truck bed height with roof cover allowing fourteen feet vertical clearance.
- (b) ADMINISTRATIVE WORK SPACE FOR RECEIVING NEAR TO RECEIVING AND BREAK-OUT AREAS. May be combined with distribution and issue area.

- (c) Floor scales.
- (6) BULK STORAGE ROOM OR ROOMS WITH STORAGE OFF FLOOR.
 - (7) BREAK-OUT AREA.
- (a) INDOOR SPACE WITHIN THE HOSPITAL TO ALLOW FOR REMOVAL AND DISPOSAL OF OUTSIDE SHIPPING CONTAINERS PRIOR TO STORAGE OR TRANSPORT WITHIN CLEAN AREAS.
- (b) PHYSICALLY SEPARATED FROM CLEAN STORAGE ROOMS.
- (c) SHALL NOT RESTRICT REQUIRED MEANS OF EGRESS.
 - (8) CLEAN STORAGE ROOMS.
- (a) DESIGNED AND EQUIPPED FOR STORAGE OF ITEMS REMOVED FROM ORIGINAL SHIPPING CONTAINERS INCLUDING PROCESSED AND STERILIZED ITEMS THAT ARE PACKAGED.
- (b) May be centralized in one storage room or decentralized according to areas or rooms for grouping of different types of items according to use.
- (c) SPACE FOR SHELVING AND/OR CART STORAGE.²⁴
- (d) LOCATION AND DESIGN OF STORAGE UNITS⁶ TO ALLOW FOR CLEANING OF WALLS, SHELVES, AND FLOORS.²⁴
- (e) ALL FIXED SHELVING AT LEAST SIX INCHES ABOVE FLOOR.
- (9) DISTRIBUTION OR ISSUE AREA OR AREAS (also see WAC 248-18-680).
- (a) LOCATED CONVENIENT TO THE EXIT FROM CLEAN STORAGE ROOMS. May be combined with office for receiving area or with issue area from central processing service.
- (b) EQUIPMENT FOR ADMINISTRATIVE FUNCTIONS, 24 e.g., desk, communication system, files
- (10) FLAMMABLE AND COMBUSTIBLE LIQUID STORAGE FACILITIES SHALL MEET REQUIREMENTS OF FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE NFPA 30. SEE WAC 248–18–99902(15) (e.g., alcohol, acetone, paint thinners, oils, and chemicals used in laboratory).
- (a) SEPARATE STORAGE ROOM OR ROOMS SIZED IN ACCORDANCE WITH QUANTITY TO BE STORED.²⁴
- (b) LOCATED TO MINIMIZE HAZARD TO THE HOSPITAL.
- (c) APPROVED CONTAINERS, VENTILATED STORAGE CABINETS, AND APPROVED FLAMMABLE STORAGE REFRIGERATORS.
- (d) CHEMICALS USED IN LABORATORY STORED IN ACCORDANCE WITH NFPA 99, CHAPTER 7. SEE WAC 248–18–99902(16).
- (11) GASEOUS OXIDIZING MATERIALS IN-CLUDING BUT NOT LIMITED TO OXYGEN, NI-TROUS OXIDE, NITROGEN TRIOXIDE, FLUORINE, CHLORINE, AND CHLORINE TRIFLUORIDE SEGREGATED IN ACCORDANCE

- WITH REQUIREMENTS OF STORAGE OF GASEOUS OXIDIZING MATERIALS NFPA 43C. SEE WAC 248–18–99902(17).
- (a) SEGREGATED ÉITHER BY SPACE OR IN A SEPARATE ROOM OR IN A SEPARATE BUILDING.
- (b) SPACE SIZED TO ACCOMMODATE QUANTITY TO BE STORED.²⁴
- (c) NONFLAMMABLE MEDICAL GAS SYSTEMS INCLUDING OXYGEN, NITROUS OXIDE, AND MEDICAL COMPRESSED AIR SHALL MEET THE STANDARD NFPA 56F. SEE WAC 248–18–99902(4).
- (12) FLAMMABLE ANESTHETIC STORAGE, when flammable anesthetics to be used in hospital. SEE WAC 248-18-99902(1).
- (a) LOCATED TO MINIMIZE HAZARD AND DISTURBANCE TO THE HOSPITAL.
- (b) SIZED TO ACCOMMODATE QUANTITY REQUIRED BY PROGRAM.
- (c) FOR USE OF FLAMMABLE ANESTHETICS, NFPA 99, CHAPTER 3, APPLIES. SEE WAC 248–18–99902(1).
 - (13) BULK FOOD STORAGE ROOM.
- (a) May be combined with day storage in room adjacent to kitchen.
- (b) ACCESSIBLE FROM AN OUTSIDE DELIVERY ENTRANCE.²⁴
 - (c) Location convenient to the kitchen.
- (d) PROPER CONSTRUCTION, VENTILATION, AND TEMPERATURE TO MINIMIZE SPOILAGE.
 - (e) PEST-PROOF CONSTRUCTION.
- (f) NO OPENINGS OR SPACES WHICH CANNOT BE CLEANED.
- (g) BOTTOM SHELF FOR FOOD STORAGE AT LEAST SIX INCHES ABOVE FLOOR.
- (h) LOCATION AND DESIGN OF STORAGE UNITS⁶ TO ALLOW FOR EASY AND REGULAR CLEANING OF SHELVES, WALLS, AND FLOORS.²⁴

Note:

⁶May be movable equipment. ²⁴In accordance with program.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-580, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030 and 43.20.050. 85-05-034 (Order 281), § 248-18-700, filed 2/15/85; Order 119, § 248-18-700, filed 5/23/75; Regulation 18.740, filed 1/25/62.]

WAC 246-318-590 Central sterilizing and processing service facilities. Optional. SHALL MEET REQUIREMENTS, IF INCLUDED. (REQUIREMENTS IN CAPITAL LETTERS. SEE WAC 248-18-515.)

- (1) GENERAL.
- (a) A SEGREGATED UNIT DESIGNED AND LOCATED:
 - (i) TO PREVENT THROUGH TRAFFIC,
- (ii) TO AVOID CONTAMINATION OF CLEAN AND STERILE SUPPLIES AND EQUIPMENT,
- (iii) TO PREVENT OBJECTIONABLE HEAT AND NOISE IN PATIENT CARE AREAS,

- (iv) TO FACILITATE DELIVERY AND RETURN OF SUPPLIES AND EQUIPMENT TO AND FROM OTHER SERVICES, 24
- (v) Near or adjacent to central stores and distribution services.
- (b) AREAS WITHIN THE UNIT ADEQUATE TO PROVIDE FOR PROPER HANDLING OF SUPPLIES AND EQUIPMENT.²⁴
 - (c) WORK FLOW:
- (i) EQUIPPED AND ARRANGED TO PROVIDE WORK FLOW MAINTAINING PROPER SEPARATION OF CLEAN OR STERILE ITEMS FROM SOILED OR CONTAMINATED ITEMS.
- (ii) DESIGNED FOR CONTINUOUS OR SE-QUENTIAL WORK FLOW FROM RECEIVING TO ISSUING.
- (d) SEPARATE RECEIVING AND DECONTA-MINATION ROOM.
- (e) SEPARATE CLEAN EQUIPMENT STORAGE ROOM. 24
- (f) ADEQUATE SPACE FOR CIRCULATION AND PARKING OF CARTS.²⁴
- (2) SOILED RECEIVING AND DECONTAMINATION ROOM OR ROOMS.
- (a) FACILITIES FOR RECEIVING, DISASSEMBLING, AND CLEANING OF SUPPLIES AND EQUIPMENT PHYSICALLY SEPARATED FROM ALL OTHER AREAS OF CENTRAL PROCESSING SERVICE.
- (b) LOCATED TO FACILITATE RETURN OF SOILED OR CONTAMINATED ITEMS WITHOUT TRANSPORTING THE ITEMS THROUGH OTHER AREAS OF CENTRAL PROCESSING SERVICE.
- (c) SPACE FOR PARKING OF SOILED COL-LECTION CARTS, IF USED.
- (d) PROVISIONS FOR CLEANING AND DISIN-FECTING CARTS AND LARGE EQUIPMENT UNLESS CART WASH FACILITIES PROVIDED ELSEWHERE. Refer to WAC 248–18–711(2).
- (e) WORK FLOW FROM DECONTAMINATION ROOM DIRECTLY INTO CLEAN PREPARATION ROOM AND/OR CLEAN CART STORAGE/PARKING AREA OR AREAS.
 - (f) EQUIPMENT:
- (i) AT LEAST ONE DOUBLE-COMPARTMENT SINK MOUNTED IN COUNTER OR INTEGRAL WITH COUNTER.
- (ii) ADDITIONAL SINKS OR MECHANICAL WASHERS AS REQUIRED BY TYPES AND VOLUME OF ITEMS TO BE PROCESSED.²⁴
 - (iii) Washer-sterilizer or sterilizer, pass-through type.
- (iv) WORK COUNTER OR EQUIVALENT SPACE FOR COLLECTION EQUIPMENT ADJACENT TO EACH SINK OR MECHANICAL WASHER FOR COLLECTION OF SOILED OR CONTAMINATED ITEMS.
- (v) WORK COUNTER OR EQUIVALENT SPACE FOR COLLECTION EQUIPMENT ADJACENT TO EACH SINK OR MECHANICAL WASHER FOR

- COLLECTION OF ITEMS WHICH HAVE BEEN WASHED.
- (vi) STORAGE FOR CLEANING AGENTS AND OTHER CLEANING SUPPLIES AND EQUIPMENT.
 - (vii) FLUSH OR RECESSED FLOOR DRAIN.
- (viii) Pressure systems such as air, water, steam, vacuum.
 - (ix) Deionized or distilled water system.
- (3) CLEAN WORKROOM, PREPARATION, AND REPACKAGING AREAS.
- (a) SPACE AND FACILITIES ARRANGED FOR ASSEMBLING AND PACKAGING SUPPLIES AND EQUIPMENT FOR STERILIZATION.
- (b) WORK SURFACES OF SUFFICIENT SIZE AND QUANTITY TO FACILITATE ASSEMBLY OF MATERIALS AND EQUIPMENT.²⁴
- (c) STORAGE FOR CLEAN ITEMS AND MATERIALS USED IN PACKAGING.
- (d) SPACE FOR PARKING OF CARTS AND OTHER MOVABLE EQUIPMENT.
- (e) HANDWASHING LAVATORY LOCATED TO PREVENT SPLASH OR SPRAY ON CLEAN ITEMS.²⁴
- (f) WHEN PREPARATION OF LINEN IS A FUNCTION IN CENTRAL PROCESSING, A SEPARATE ROOM IS REQUIRED TO AVOID ACCUMULATION AND SPREAD OF LINT.²⁴
 - (4) FACILITIES FOR STERILIZING.
- (a) LOCATED BETWEEN FACILITIES FOR ASSEMBLING AND PACKAGING AND FACILITIES FOR STORAGE OF CLEAN AND STERILE SUPPLIES.
 - (b) EQUIPMENT:
- (i) AT LEAST ONE PRESSURE STERILIZER OF ADEQUATE SIZE.
- (ii) ADDITIONAL PRESSURE STERILIZERS AS REQUIRED BY VOLUME OF ITEMS TO BE PROCESSED.
- (iii) PRESSURE STERILIZERS TO HAVE RE-CORDING THERMOMETERS AND AUTOMATIC CONTROLS.
- (iv) Ethylene oxide sterilizer with automatic controls. MECHANICAL AERATOR REQUIRED WHEN ETHYLENE OXIDE STERILIZER INSTALLED.⁶
 - (v) Dry heat sterilizer.
- (5) STORAGE OF CLEAN AND STERILE ITEMS FOR ISSUE/DISTRIBUTION FROM CENTRAL PROCESSING SERVICE. 6, 18
- (a) SEPARATE ROOM OR AREA LOCATED TO FACILITATE ISSUE WITHOUT TRANSPORT OF CLEAN AND STERILE ITEMS THROUGH OTHER AREAS OF CENTRAL PROCESSING AND STERILIZING SERVICE.
- (b) IF STORAGE AREA IS PART OF THE PREPARATION AREA, ENCLOSED SHELVING IN CABINETS, CARTS, OR EQUIVALENT SHALL BE PROVIDED.⁶ Open shelving permitted if separate room provided.⁶
- (6) CLEAN EQUIPMENT STORAGE ROOM, AREA, OR AREAS. 18 Also refer to WAC 248–18–700.

- (a) LOCATED TO FACILITATE ISSUE OF LARGE AND SMALL PATIENT CARE EQUIPMENT. SEPARATED FROM OTHER AREAS OF CENTRAL PROCESSING SERVICE. May be centralized in one room or area or decentralized on each nursing unit or within each department.²⁴
- (b) AREA SUFFICIENT TO PROVIDE FOR PROPER HANDLING OF EQUIPMENT IN ACCORDANCE WITH PLANNED SYSTEM.²⁴
- (c) PROVISION FOR CLEANING THE EQUIPMENT IN THE DECONTAMINATION ROOM, CART-WASH ROOM OR AREA OR OTHER SUITABLE FACILITIES IN THE HOSPITAL WITH SINK OR EQUIVALENT.
- (7) DISTRIBUTION/ISSUE AREA OR AREAS. Also refer to WAC 248-18-700.
- (a) LOCATED TO FACILITATE ISSUE OF CLEAN AND STERILE ITEMS WITHOUT BACKTRACKING THROUGH OTHER AREAS OF CENTRAL PROCESSING SERVICE.
- (b) SPACE FOR MOVEMENT AND PARKING OF CARTS. 24
- (c) SPACE FOR EQUIPMENT; e.g., communication system, files, labeling.
 - (8) PERSONNEL FACILITIES.
- (a) TOILET, SHOWER ROOM OR AREA, CHANGE AND LOCKER AREA AS CLOSE AS POSSIBLE TO ENTRANCE OF CENTRAL PROCESSING/STERILIZING UNIT WITH STORAGE FOR CLEAN WORK ATTIRE. May be combined with other facilities if close by and adequate for both.
- (b) LOCKER ROOM with storage²⁴ or equivalent for clean attire LOCATED TO ALLOW SEPARATE ACCESS TO AND FROM CLEAN AND SOILED ROOMS.
- (9) OFFICE ROOM OR SPACE WITH COMMUNICATION DEVICE.
- (a) LOCATED TO PERMIT ACCESS FROM PUBLIC AREAS WITHOUT ENTERING PROCESSING AREAS.
- (b) Located to allow observation of activities within central processing service.
- (c) May be desk and file space in suitable location within workroom.
 - (10) HOUSEKEEPING FACILITIES.5

Combination with other housekeeping facilities permitted only if suitable and convenient to central sterilizing and processing service facilities.

Notes:

 $^5 See$ GENERAL REQUIREMENTS FOR SERVICE FACILITIES, WAC 248–18–711(6), HOUSEKEEPING FACILITIES.

⁶May be movable equipment.

¹⁸See GENERAL REQUIREMENTS FOR SERVICE FACILITIES, WAC 248–18–711(10), STORAGE FACILITIES.

²⁴In accordance with program.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-590, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.41 RCW. 90-12-014 (Order 061), § 248-18-680, filed 5/30/90, effective 6/30/90. Statutory Authority: RCW 70.41.030 and 43.20.050. 85-05-034 (Order 281), § 248-18-680, filed

2/15/85; 83-19-058 (Order 269), § 248-18-680, filed 9/20/83; Order 119, § 248-18-680, filed 5/23/75; Regulation 18.700, filed 1/25/62.]

WAC 246-318-600 Housekeeping department. (RE-QUIREMENTS IN CAPITAL LETTERS – SEE WAC 248-18-515.)

- (1) Administrative facilities.
- (a) Office space.
- (b) Telephone.
- (2) STORAGE ROOM.
- (a) RACKS, BINS, SHELVES, CABINETS.

For: Extra mop trucks and pails.
Vacuum cleaners and polishers.
Wall-working equipment.
Scaffolding and ladders.
Handtrucks and maids' carts.
Extra mop heads and wringers.

Dusters and cleaning cloths. Soaps and detergents.

(b) LOCKED CUPBOARD.

For: Pesticides, drain cleaners, etc.

- (3) FACILITIES FOR CLEANING.
- (a) LARGE EQUIPMENT CLEAN-UP AREA.24
- (i) May be within storage room for housekeeping equipment if properly separated from storage area.

(ii) EQUIPMENT:

SINK.

FLOOR DRAIN.

(b) HOUSEKEEPING FACILITIES.5

WITHIN OR CONVENIENT TO EACH AREA OF THE HOSPITAL AS REQUIRED IN OTHER SECTIONS OF THESE REGULATIONS.

- (4) WASTE DISPOSAL FACILITIES.
- (a) LOCATED TO PREVENT OBJECTIONABLE TRAFFIC, SMOKE, AND ODORS IN OTHER AREAS OF THE HOSPITAL.
 - (b) Waste chutes not recommended.
 - (c) INCINERATION FACILITIES.
 - (d) STORAGE AREA.
- (i) LOCATED IN SEPARATE, WELL-VENTI-LATED ROOM OR OUTSIDE, ENCLOSED SPACE.
- (ii) CONSTRUCTED TO PREVENT RAT HARBORAGE.
 - (e) CAN WASH AREA.

CAN WASH AREA WITH FLOOR DRAIN, HOT AND COLD WATER. Steam recommended.

Notes:

⁵See GENERAL REQUIREMENTS FOR SERVICE FACILITIES, WAC 248–18–711(6), HOUSEKEEPING FACILITIES.

²⁴In accordance with program.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–600, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.41 RCW. 90–12–014 (Order 061), § 248–18–690, filed 5/30/90, effective 6/30/90. Statutory Authority: RCW 70.41.030 and 43.20.050. 83–19–058 (Order 269), § 248–18–690, filed 9/20/83; Order 119, § 248–18–690, filed 5/23/75; Regulation 18.720, filed 1/25/62.]

WAC 246-318-610 Laundry facilities. (REQUIRE-MENTS IN CAPITAL LETTERS – SEE WAC 248-

- 18–515.) FACILITIES LISTED UNDER SUBSECTION (1) OR (2) OF THIS SECTION ARE REQUIRED.
- (1) FACILITIES REQUIRED WHEN COMMER-CIAL LAUNDRY SERVICE USED EXCLUSIVELY.
- (a) ADEQUATE SPACE FOR CIRCULATION AND SEPARATE PARKING AREAS FOR CLEAN AND SOILED CARTS.
 - (b) SOILED LINEN ROOM.
- (i) LOCATED TO PREVENT ODORS AND CONTAMINATION TO PATIENT CARE, SUPPLY, AND FOOD SERVICE AREAS.
- (ii) SUITABLY LOCATED FOR DISPATCHING TO COMMERCIAL LAUNDRY.
- (iii) SEPARATE ENCLOSED ROOM. AR-RANGED TO AVOID THROUGH TRAFFIC.
- (iv) SIZED FOR STORAGE OF THREE DAYS' ACCUMULATION OF SOILED LINEN AND NECESSARY SORTING (IF ANY).
- (v) MECHANICAL VENTILATION TO PROVIDE AN EXCESS OF EXHAUST OVER SUPPLY.³³
 - (vi) EQUIPMENT:

HANDWASHING FACILITY IN OR ADJACENT.

FLOOR DRAIN.

- (c) CLEAN LINEN ROOM.
- (i) SEPARATE ENCLOSED ROOM.
- (ii) ARRANGED TO AVOID THROUGH TRAFFIC.
- (iii) LOCATED AND ARRANGED TO AVOID SOURCES OF MOIST OR CONTAMINATED AIR.
- (iv) SIZED FOR STORAGE OF RESERVE SUPPLY OF LINEN, BLANKETS, AND PILLOWS.
 - (d) SEWING ROOM.

May be combined with clean linen room.

(e) HOUSEKEEPING FACILITIES.5

Suitable combination with other housekeeping facilities permitted if convenient to laundry facilities.

- (2) FACILITIES REQUIRED WHEN LAUNDRY IS PROCESSED IN HOSPITAL.
- (a) LOCATED AND ARRANGED TO PREVENT OBJECTIONABLE HEAT, NOISE, ODORS, MOISTURE, AND CONTAMINATION TO PATIENT CARE, SUPPLY, AND FOOD SERVICE AREAS.
- (b) ADEQUATE SPACE FOR CIRCULATION AND SEPARATE PARKING AREAS FOR CLEAN AND SOILED CARTS.
 - (c) SOILED LINEN ROOM.
 - (i) SEPARATE ENCLOSED ROOM.
- (ii) ARRANGED TO AVOID THROUGH TRAFFIC.
- (iii) SIZED FOR STORAGE OF THREE DAYS' ACCUMULATION OF SOILED LINEN AND NECESSARY SORTING (IF ANY).
 - (iv) EQUIPMENT:

HANDWASHING FACILITY IN OR ADJACENT.

FLOOR DRAIN.

MECHANICAL VENTILATION TO PROVIDE AN EXCESS OF EXHAUST OVER SUPPLY.³³

- (d) PROCESSING ROOM OR ROOMS.
- (i) SEPARATE FROM OTHER HOSPITAL FACILITIES.
- (ii) ROOM SIZE AND CAPACITY OF EQUIPMENT ADEQUATE TO PROCESS FULL SEVEN DAYS' LAUNDRY IN WORK WEEK.
- (iii) ARRANGED FOR UNINTERRUPTED FLOW FROM SOILED TO CLEAN (I.E., WASHING, EXTRACTING, IRONING, FOLDING, STORAGE).
- (iv) BOTH SOILED AND CLEAN LINENS STORED OUTSIDE PROCESSING AREA.
- (v) ADEQUATE VENTILATION PROPERLY ENGINEERED TO AVOID FLOW OF POTENTIALLY CONTAMINATED AIR FROM WASH AREA TO CLEAN AREAS.³³
 - (vi) EQUIPMENT:

COMMERCIAL WASHER OR WASHERS LO-CATED TO AVOID THE SPREAD OF CONTAMI-NANTS IN THE LOADING OF SOILED LINEN.

COMMERCIAL EXTRACTOR OR EXTRACTORS.

COMMERCIAL TUMBLER OR TUMBLERS.

Commercial ironer or ironers.

Presses.

STORAGE FOR LAUNDRY SUPPLIES. HANDWASHING FACILITY IN WASH AREA. FLOOR DRAIN IN WASH AREA.

- (e) Drying room.
- (i) REQUIRED IF HANG DRYING IS TO BE DONE.
 - (ii) SEPARATE ENCLOSED ROOM.
- (iii) ARRANGED TO AVOID THROUGH TRAFFIC.
- (iv) SIZED AND EQUIPPED TO SUIT DRYING NEEDS (e.g., blankets, curtains, etc.).
- (iv) ADEQUATE VENTILATION PROPERLY ENGINEERED TO AVOID FLOW OF POTENTIALLY CONTAMINATED AIR INTO ROOM.³³
 - (f) SEWING ROOM.
 - May be combined with clean linen room.
 - (g) CLEAN LINEN ROOM.
 - (i) SEPARATE ENCLOSED ROOM.
- (ii) ARRANGED TO AVOID THROUGH TRAFFIC.
- (iii) LOCATED AND ARRANGED TO AVOID SOURCES OF MOIST OR CONTAMINATED AIR.
- (iv) SIZED FOR STORAGE OF RESERVE SUP-PLY OF LINEN, BLANKETS, AND PILLOWS.
 - (h) HOUSEKEEPING FACILITIES.3
- (i) FACILITIES SERVING OTHER AREAS OF THE LAUNDRY MAY NOT BE IN SOILED LINEN ROOM.
- (ii) Suitable combination with other housekeeping facilities permitted if convenient to laundry facilities.

Notes:

⁵See GENERAL REQUIREMENTS FOR SERVICE FACILITIES, WAC 248–18–711(6), HOUSEKEEPING FACILITIES.

³³See GENERAL DESIGN REQUIREMENTS, WAC 248–18–719(2) and Table 719–3, VENTILATION.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–610, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.41 RCW. 90–12–014 (Order 061), § 248–18–695, filed 5/30/90, effective 6/30/90. Statutory Authority: RCW 70.41.030 and 43.20.050. 83–19–058 (Order 269), § 248–18–695, filed 9/20/83; Order 119, § 248–18–695, filed 5/23/75; Regulation 18.730, filed 1/25/62.]

WAC 246-318-620 Dietary department. (RE-QUIREMENTS IN CAPITAL LETTERS – SEE WAC 248-18-515.)

- (1) DIETARY DEPARTMENT, GENERAL.
- (a) SUITABLY LOCATED TO FACILITATE DE-LIVERY OF STORES, DISPOSAL OF KITCHEN WASTE, AND TRANSPORTATION OF FOOD TO NURSING UNITS.
- (b) EQUIPMENT CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH NATIONAL SANITATION FOUNDATION STANDARDS.²⁶
- (c) ALL EQUIPMENT AND COUNTERS CONSTRUCTED FOR EASY CLEANING AND FREE FROM INACCESSIBLE SPACE PROVIDING HARBORAGE FOR VERMIN.
- (d) ADEQUATE SPACE BETWEEN EQUIPMENT (INCLUDING CASEWORK) AND WALL AND/OR FLOOR TO PERMIT CLEANING; OR, EQUIPMENT TIGHT AGAINST WALL AND/OR FLOOR AND JOINT PROPERLY SEALED.
- (e) ADEQUATE SPACE FOR CIRCULATION OF CARTS THROUGHOUT DIETARY DEPARTMENT.
 - (2) ADMINISTRATIVE FACILITIES.
- (a) OFFICE SPACE may be limited to desk and file space.²⁴
 - (b) Separate room recommended.
 - (3) RECEIVING AREA.²⁷
- (a) LOCATED FOR READY ACCESS TO REFRIGERATION AREA.
 - (b) Floor scales.
 - (4) BULK FOOD STORAGE AREA.²⁷
 - (5) DAY STORAGE ROOM OR AREA.
- (a) IN OR ADJACENT TO KITCHEN may be combined in a room with bulk food storage.
 - (b) SPACE FOR THREE DAYS SUPPLY.
- (c) STORAGE SHELVES AT LEAST TWELVE INCHES OFF FLOOR AND AT LEAST EIGHTEEN INCHES FROM TOP OF SHELVES TO CEILING.
- (d) SPACE FOR LARGE CONTAINERS AND DOLLIES.
 - (6) REFRIGERATION AREA.
 - (a) IN OR ADJACENT TO KITCHEN.
- (b) SPACE ADEQUATE FOR MINIMUM OF THREE DAYS SUPPLY.
 - (c) REFRIGERATION UNITS, GENERAL.6
- A MINIMUM OF TWO SEPARATE SECTIONS OR BOXES (ONE FOR MEATS AND DAIRY PRODUCTS AND ONE FOR FRUIT AND VEGETABLES) three sections or boxes recommended (one for meat, one for dairy products, and one for fruit and vegetables).
 - (d) Walk-in boxes.

- (i) SHELVES AT LEAST TWELVE INCHES OFF FLOOR.
- (ii) SPACE FOR LARGE STORAGE CONTAIN-ERS AND DOLLIES.
 - (e) Frozen food storage.

Section of walk-in box or separate deep freeze unit.

- (7) Ice facilities.
- (a) LOCATED TO AVOID CONTAMINATION OF ICE AND TO AVOID TRAFFIC INTO KITCHEN FOR ICE SERVICE FOR OTHER DEPARTMENTS.
 - (b) EQUIPMENT:

WORK COUNTER.6

ICE MACHINE OR ADEQUATE STORAGE UNIT (self-dispensing types recommended).

- (8) KITCHEN.
- (a) LOCATED AND ARRANGED TO AVOID CONTAMINATION OF FOOD; TO PREVENT OB-JECTIONABLE HEAT, NOISE, AND ODORS TO PATIENT CARE AREAS; AND TO ELIMINATE THROUGH TRAFFIC.
 - (b) ADEQUATE FLOOR DRAINS.
- (c) ADEQUATE SPACE FOR GARBAGE CONTAINERS.
 - (d) MEAT PREPARATION AREA.
- (i) May be omitted if only prefabricated meats are to be used.
 - (ii) EQUIPMENT:

SINK WITH INTEGRAL DRAINBOARD OR COUNTER.

WORK TABLE OR COUNTER.6

MEAT BLOCK.6

Lavatory.

- (e) FRUIT AND VEGETABLE PREPARATION AREA.
- (i) LOCATED TO AVOID CONTAMINATION OF PREPARED FOODS AND CLEAN EQUIP-MENT BY SOIL FROM VEGETABLES.
 - (ii) EQUIPMENT:

TWO-COMPARTMENT SINK WITH INTE-GRAL DRAINBOARDS OR COUNTERS.

Food waste grinder.

Vegetable peeler.

- (f) COOKING AREA.
- (i) Located between preparation and serving units.
- (ii) EQUIPMENT:

RANGE(S).

WORK TABLE(S) OR COUNTER(S).6

UTENSIL STORAGE.

COOK'S SINK - meat or vegetable sink may be used if conveniently located.

OVEN(S).2

Steam kettles.

Mixers.

(g) SALAD AND SANDWICH PREPARATION AREA.29

EQUIPMENT:

WORK TABLE OR COUNTER.⁶ REFRIGERATOR.⁶ ³⁰

(h) DESSERT PREPARATION AREA.29 **EQUIPMENT:**

WORK TABLE OR COUNTER.6 REFRIGERATOR. 6 30

- (i) SPECIAL DIET PREPARATION AREA.
- (i) May be omitted if special diets are to be prepared in same areas as general diets.
 - (ii) EQUIPMENT:

SINK WITH INTEGRAL DRAINBOARD OR COUNTER.

REFRIGERATOR.6 30

WORK COUNTER.6

STORAGE CABINETS.

RANGE.

(j) Bakery area.

EQUIPMENT:

MIXER(S).

OVEN(S).

RANGE.

THREE-COMPARTMENT SINK - may be single compartment if utensils are to be washed in main pot and pan wash area.

WORK TABLE(S).6

COOLING RACK.6

POT AND PAN CABINET.

STORAGE SHELVES.

PROOF BOX⁶ unless bread is purchased elsewhere.

- (k) PATIENT SERVING AREA.
- (i) ADEQUATE SPACE FOR MOBILE EQUIP-MENT SUCH AS FOOD CARTS AND TRAY CARTS.24
 - (ii) EQUIPMENT:

ADEQUATE SERVING EQUIPMENT.24

CLOSED STORAGE UNITS FOR FOOD CON-TAINERS, DISHES, AND TRAYS - may be on open shelves at least thirty inches above floor if utensils are to be reused within twenty-four hour periods.

ICE CREAM STORAGE.24

BEVERAGE SERVICE EQUIPMENT.²⁴

- (9) EMPLOYEE SERVING AREA.²⁴
- (a) LOCATED AND ARRANGED TO ELIMI-NATE TRAFFIC INTO KITCHEN FOR SERVICE. Convenient to kitchen.
- (b) PROTECTION OF OPEN FOOD DISPLAY COUNTERS.
- (c) REFRIGERATION FOR PERISHABLE FOODS.24
 - (10) DINING ROOM OR AREA.
- (a) ADJACENT TO EMPLOYEE SERVING AREA – adjacent to dishwashing area.
- (b) AT LEAST TWELVE SQUARE FEET OF FLOOR AREA PER PERSON FOR THE MAXI-MUM NUMBER TO BE SERVED AT ANY ONE TIME.
 - (11) POT AND PAN WASH AREA.²⁹

EQUIPMENT:

THREE-COMPARTMENT SINK (OR EQUIVA-LENT) WITH INTEGRAL DRAINBOARDS OR COUNTERS.

Floor drain.

STORAGE CABINETS.

Food waste grinder.

(12) DISHWASHING ROOM OR AREA.

- (a) May be located in a separate area of the kitchen.
- (b) LOCATED TO AVOID TRAFFIC THROUGH OTHER AREAS OF THE KITCHEN.
- (c) LOCATED TO PERMIT UNLOADING OF TRAY CARTS AND RECEIVING OF SOILED DISHES FROM DINING ROOM WITHOUT OB-STRUCTING TRAFFIC IN CORRIDORS.
 - (d) EQUIPMENT:

DISHWASHING MACHINE OR EQUIVALENT. FLOOR DRAIN.

COUNTER FOR DIRTY DISHES.

Food waste grinder.

SPACE FOR GARBAGE CAN.

PRE-RINSE SINK UNLESS DISHWASHER EQUIPPED FOR PRE-RINSE CYCLE.

COUNTER FOR CLEAN DISHES.6

LAVATORY - may be located in cooking area if convenient to dishwashing area.

- (13) GARBAGE FACILITIES.
- (a) May be combined with general waste disposal facilities.
- (b) ADEQUATE SPACE (twenty-four square feet of floor area plus five square feet of storage space per can).
 - (c) STORAGE AREA.
- (i) LOCATED IN SEPARATE, WELL-VENTI-LATED ROOM OR OUTSIDE, ENCLOSED SPACE.
 - (ii) CONVENIENT TO KITCHEN.
- (iii) CONSTRUCTED TO PREVENT RAT HARBORAGE.
 - (iv) Refrigerated storage.
 - (d) CAN WASH AREA.
- GARBAGE CAN WASH AREA WITH FLOOR DRAIN AND HOT AND COLD WATER. Steam recommended.
 - (14) HOUSEKEEPING FACILITIES.⁵

Suitable combination with other housekeeping facilities permitted if convenient to dietary facilities.

Notes:

⁵See GENERAL REQUIREMENTS FOR SERVICE FACILI-TIES, WAC 248–18–711(6), HOUSEKEEPING FACILITIES (JANITORS' AND MAIDS').

May be movable equipment.

²⁴In accordance with program.

²⁶See GENERAL DESIGN REQUIREMENTS, WAC 248–18–719 (5) and (6), EQUIPMENT AND CASEWORK.

See RECEIVING AND STORES, WAC 248-18-700.

²⁸May be combined with ranges.

²⁹May be combined with cooking areas.

³⁰May be combined with other refrigeration.

³¹See HOUSEKEEPING DEPARTMENT, WAC 248–18–690(4), WASTE DISPOSAL FACILITIES.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-620, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.41 RCW. 90-12-014 (Order 061), § 248-18-685, filed 5/30/90, effective 6/30/90. Statutory Authority: RCW 70.41.030 and 43.20.050. 83-07-048 (Order 257), § 248-18-685, filed 3/18/83; Order 119, § 248–18–685, filed 5/23/75; Regulation 18.710, filed 1/25/62.]

WAC 246-318-630 Laboratory facilities. (RE-QUIREMENTS IN CAPITAL LETTERS – SEE WAC 248-18-515.) NUMBER, SIZE, AND TYPE OF FACILITIES DEPENDENT UPON TYPE AND

ANTICIPATED VOLUME OF LABORATORY WORK AS PRESENTED IN FUNCTIONAL PROGRAM.

- (1) LABORATORY, GENERAL.
- (a) LOCATED TO AVOID OUTPATIENT TRAF-FIC THROUGH INPATIENT AREAS.
- (b) ELECTRICAL SERVICE. EMERGENCY POWER TO CRITICAL LABORATORY AREAS.
 - (c) NOISE ATTENUATION.²⁴
- (d) PIPED UTILITY VALVES AND WASTE LINE CLEAN-OUTS ACCESSIBLE FOR REPAIR AND MAINTENANCE.
 - (e) WAITING AREA AVAILABLE.²⁴
- (f) WORK AREAS FOR TECHNICAL, CLERI-CAL, AND ADMINISTRATIVE STAFF, FILES, AND STORAGE AREAS.²⁴
- (g) STAFF TOILET CONVENIENT LABORATORY.
 - (2) EQUIPMENT LABORATORY GENERAL:
- (a) WORK COUNTER OR COUNTERS AT LEAST TWENTY-FOUR INCHES DEEP (FREE WORK SPACE) AND TWENTY-EIGHT INCHES HIGH AND OF SUFFICIENT DEPTH, HEIGHT, AND LENGTH TO ACCOMMODATE LABORA-TORY **EQUIPMENT** AND WORK PROCEDURES. 20, 24
- KNEE HOLE SPACES WORK (b)
- (c) SINK OR SINKS IN TESTING AREA OR AREAS.^{19, 24}
- **SPACE FOR FREESTANDING** (d) EQUIPMENT.24
- (e) SPACE FOR CHAIRS AND/OR STOOLS AT WORK STATIONS.²⁴
- ACCESSIBLE EMERGENCY EASILY SHOWERS WITH FLOOR DRAINS AND EYE WASHERS.24
- (g) DRAINAGE FOR EQUIPMENT AND WASTE DISPOSAL.²⁴
- (3) HOUSEKEEPING FACILITIES WHICH ARE SEPARATE OR SUITABLY COMBINED WITH OTHER HOUSEKEEPING FACILITIES CONVE-NIENT TO THE LABORATORY FACILITIES.
 - (4) BLOOD DRAWING FACILITIES.
- (a) ROOM OR PRIVATE AREA SEPARATE FROM LABORATORY TESTING AREA.
 - (b) EQUIPMENT.
 - (i) WORK COUNTER.6
 - (ii) LAVATORY.
- (iii) SPACE TO ACCOMMODATE ADULT WHEELCHAIR AND ACCOMMODATION FOR INFANTS.
- (5) WHEELCHAIR ACCESSIBLE PATIENT TOILET.
- **LOCATED** CONVENIENT TO (a) LABORATORY.
 - (b) OPEN SHELF IN TOILET.
- CLEAN-UP, DECONTAMINATION, BIOHAZARDOUS WASTE COLLECTION, OR SOILED UTILITY FACILITIES IN LABORATORY OR ELSEWHERE.24

- (7) WHEN PROVIDED IN FUNCTIONAL PROGRAM, SPECIMEN PREPARATION FACILITY SHALL INCLUDE THE FOLLOWING:²⁴
- (a) LOCATED IN OR ADJACENT TO LABORATORY.
- (b) EQUIPMENT AS REQUIRED IN SUBSECTION (2) OF THIS SECTION.
- (8) WHEN PROVIDED IN FUNCTIONAL PROGRAM, A MEDIA PREPARATION FACILITY SHALL INCLUDE A ROOM OR AREA MEETING VENTILATION REQUIREMENTS SPECIFIED IN WAC 248–18–719(2) and Table 719–3.²⁴
- (9) WHEN PROVIDED IN FUNCTIONAL PROGRAM, A REAGENT PREPARATION FACILITY SHALL INCLUDE EQUIPMENT AS REQUIRED IN SUBSECTION (2) OF THIS SECTION WITH THE FOLLOWING DIFFERENCES OR EXCEPTIONS:²⁴
- (a) SPACE FOR VIBRATION-FREE BALANCE TABLE UNLESS AVAILABLE ELSEWHERE IN LABORATORY.
- (b) EQUIPMENT FOR PREPARATION OF REAGENT WATER OR OUTLET FOR PIPED REAGENT WATER PREPARED ELSEWHERE.²⁴
- (10) WHEN PROVIDED IN FUNCTIONAL PROGRAM, MICROBIOLOGY FACILITY SHALL INCLUDE:²⁴
- (a) SEPARATE ENCLOSED ROOM OR AN AREA LOCATED AWAY FROM TRAFFIC FLOW.
- (b) EQUIPMENT AS REQUIRED IN SUBSECTION (2) OF THIS SECTION WITH THE FOLLOWING DIFFERENCES OR EXCEPTIONS:
- (i) SPACE FOR SPECIAL GAS CYLINDERS WITH SAFETY FASTENERS UNLESS ALL GAS IS PIPED IN.
- (ii) FOR HIGHLY INFECTIOUS MATERIALS (INCLUDING BUT NOT LIMITED TO TUBERCLE BACILLUS, VIRUS, SYSTEMIC MYCOLOGY), PROVIDE ADDITIONAL ENCLOSED AREA WITH COUNTERS, SINK, STORAGE, AND BIOLOGICAL SAFETY CABINET OR LAMINAR FLOW HOOD.²⁴
- (11) WHEN PROVIDED IN FUNCTIONAL PROGRAM, BLOOD BANK FACILITY SHALL INCLUDE:
- (a) EQUIPMENT AS REQUIRED IN SUBSECTION (2) OF THIS SECTION,
- (b) A BLOOD BANK REFRIGERATOR EQUIPPED WITH HIGH AND LOW TEMPERA-TURE ALARM WHICH SIGNALS IN STAFFED AREA, AND
 - (c) EMERGENCY POWER.
- (12) CHEMISTRY FACILITIES, WHEN PROVIDED IN FUNCTIONAL PROGRAM SHALL INCLUDE EQUIPMENT AS REQUIRED IN SUBSECTION (2) OF THIS SECTION WITH THE FOLLOWING DIFFERENCES OR EXCEPTIONS.
- (a) FUME HOOD WHEN ANY PROCEDURE PRODUCES DANGEROUS, TOXIC, OR NOXIOUS FUMES.²⁴

- (b) SPECIAL EQUIPMENT PROPERLY VENTED AS PER MANUFACTURER'S INSTRUCTIONS (e.g., atomic absorption).²⁴
- (c) SPECIAL GASES PIPED IN OR SPACE FOR SPECIAL GAS CYLINDERS WITH SAFETY FASTENERS (WHEN SPECIAL GASES REQUIRED FOR PROCEDURES).²⁴
- (13) WHEN PROVIDED IN FUNCTIONAL PROGRAM, CYTOLOGY FACILITY SHALL INCLUDE EQUIPMENT AS REQUIRED IN SUBSECTION (2) OF THIS SECTION AND FORCED AIR EXHAUST VENTILATION OVER STAINING AREA.
- (14) WHEN INCLUDED IN FUNCTIONAL PROGRAM, HEMATOLOGY FACILITIES SHALL BE LOCATED AS REQUIRED IN SUBSECTION (1) OF THIS SECTION AND EQUIPPED AS IN SUBSECTION (2) OF THIS SECTION.
- (15) WHEN PROVIDED IN FUNCTIONAL PROGRAM, HISTOLOGY FACILITIES SHALL INCLUDE:
- (a) LOCATED IN A SEPARATE ROOM OR AREA.
- (b) EQUIPMENT AS REQUIRED IN SUBSECTION (2) OF THIS SECTION WITH THE FOLLOWING DIFFERENCES OR EXCEPTIONS:
- (i) FUME HOOD OR FORCED AIR LOCATED TO EXHAUST TISSUE PROCESSING EQUIPMENT AND AREAS AS NECESSARY.
- (ii) SPACE FOR FROZEN SECTION EQUIP-MENT WHEN FROZEN SECTIONS ARE TO BE PERFORMED IN THIS AREA.²⁴
- (16) MORGUE FACILITIES WHEN IN FUNC-TIONAL PROGRAMS SHALL INCLUDE:²⁴
- (a) LOCATED TO ACCOMMODATE TRANS-PORTATION OF BODIES VIA LEAST PUBLIC USE CORRIDOR OR CORRIDORS.
 - (b) REFRIGERATION FOR BODY STORAGE.
- (c) SPACE FOR HOUSEKEEPING EQUIPMENT.²⁴
- (17) AUTOPSY ROOM WHEN IN FUNCTIONAL PROGRAM SHALL INCLUDE:
 - (a) LOCATION CONVENIENT TO MORGUE.
 - (b) EQUIPMENT.
- (i) AUTOPSY TABLE WITH WATER SUPPLY, SUCTION OUTLET, AND APPROPRIATE DRAIN.
- (ii) SPACE FOR DISSECTION TABLE OR COUNTER (MAY BE PART OF AUTOPSY TABLE).6
 - (iii) FLOOR DRAIN.
 - (iv) SCRUB SINK.
- (v) STORAGE FOR SUPPLIES AND EQUIPMENT.⁶
- (vi) INSTRUMENT STERILIZER UNLESS PRO-VIDED ELSEWHERE.
- (vii) CLINIC SERVICE SINK (SIPHON JET) OR OTHER TISSUE DISPOSAL SYSTEM.
 - (viii) CHANGING ROOM AND SHOWER.24
- (c) SPACE FOR HOUSEKEEPING EQUIPMENT.²⁴

- (18) WHEN PROVIDED IN FUNCTIONAL PRO-GRAM, ANIMAL QUARTERS WHICH SHALL INCLUDE:
- (a) LOCKED APART FROM LABORATORY AND TO AVOID ANNOYANCE.
- (b) ADEQUATE FACILITIES BASED UPON TYPES AND EXTENT OF USAGE OF ANIMALS IN LABORATORY WORK, INCLUDING PROVI-SIONS FOR FOOD AND SUPPLY STORAGE, HANDWASHING, DISPOSAL OF WASTES AND DEAD ANIMALS, CLEANING AND SANITIZING OF QUARTERS AND CAGES, AND LOCKED ISO-LATION OF INOCULATED ANIMALS.

Notes:

⁵See GENERAL REQUIREMENTS FOR SERVICE FACILI-TIES, WAC 248-18-711(6), HOUSEKEEPING FACILITIES.

⁶May be movable equipment. ¹⁹CORROSION RESISTANT – Stainless steel recommended.

²⁰IMPERMEABLE SURFACE.

²⁴IN ACCORDANCE WITH PROGRAM.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-630, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.41 RCW. 90-12-014 (Order 061), § 248-18-660, filed 5/30/90, effective 6/30/90. Statutory Authority: RCW 70.41.030. 87–23–056 (Order 2560), § 248–18–660, filed 11/18/87. Statutory Authority: RCW 70.41.030 and 43.20.050. 83-19-058 (Order 269), § 248-18-660, filed 9/20/83; Order 119, § 248-18-660, filed 5/23/75; § 248-18-660, filed 10/3/67; Regulation 18.660, filed 1/25/62.]

WAC 246-318-640 Pharmacv. (REQUIRE-MENTS IN CAPITAL LETTERS. SEE WAC 248-18-515.) Not required if hospital is to use outside pharmacy services exclusively.

PHARMACY, GENERAL.

- (a) LOCATED IN A CLEAN, SECURE ROOM.
- (b) ALL ENTRANCES EQUIPPED WITH CLOSERS.
- (c) LOCKING MECHANISMS ON ALL EN-TRANCE DOORS.
- (d) ALL PERIMETER WALLS OF THE PHAR-MACY AND VAULT SHALL BE CONSTRUCTED FULL HEIGHT FROM FLOOR TO UNDERSIDE OF STRUCTURE ABOVE.
- (e) ACCESSIBLE WINDOWS AND RELITES SUPPLIED WITH SECURITY DEVICES OR ALARM SYSTEMS.
- (f) EMERGENCY SIGNAL DEVICE TO SECURE EMERGENCY ASSISTANCE.
- (2) GENERAL COMPOUNDING AND DIS-PENSING UNIT OR AREA.
- (a) Dispensing window. If provided, equipped with appropriate security device.
- (b) Instruction area to allow for patient privacy while receiving instructions regarding drug usage.
 - (c) EQUIPMENT:
 - (i) WORK COUNTER.20
- (ii) SINK¹⁹ (MOUNTED IN COUNTER OR IN-TEGRAL WITH COUNTER).
- (iii) STORAGE UNIT⁶ Drawers, cupboards, and shelves to accommodate different size containers.
 - (iv) REFRIGERATOR.6
 - (v) Freezer.6

- **SPACE FOR** TRANSPORTATION (vi) EQUIPMENT.24
 - (vii) Telephone.
 - (viii) Bulletin board.
 - (3) Manufacturing and unit dose packaging area.
- (a) Located in a work area separate from other functions.
 - (b) EQUIPMENT:
- (i) WORK COUNTER.²⁰
 (ii) SINK¹⁹ (MOUNTED IN COUNTER OR IN-TEGRAL WITH COUNTER).
 - (iii) STORAGE UNITS'
- (4) Parenteral. Admixtures, Radiopharmaceuticals, and Other Sterile Compounding Area.
- (a) LOW TRAFFIC, CLEAN AREA. May be located in other suitable, clean area outside pharmacy.
 - (b) PREPARATION AREA.

EQUIPMENT:

- (i) WORK COUNTER.20
- (ii) Laminar flow unit. (iii) SINK¹⁹ (MOUNTED IN COUNTER OR IN-TEGRAL WITH COUNTER).
- (iv) SPACE FOR PARKING OF PORTABLE EQUIPMENT.²⁴
 - (v) STORAGE UNITS.6
- (5) LOCKED STORAGE FOR SCHEDULE II CONTROLLED SUBSTANCES.
- (6) SPACE FOR FILES AND CLERICAL FUNC-TIONS. May be located in another suitable area outside the pharmacy. Office and library.
- (7) Waiting room or area. Located outside the physical boundaries of the pharmacy.
 - (8) Conference room.
- (9) BREAKOUT AREA SEPARATE FROM CLEAN AREAS.
 - (10) HOUSEKEEPING FACILITIES.

Suitable combination with other housekeeping facilities permitted if convenient to pharmacy.

May be movable equipment.

¹⁹CORROSION RÉSISTANT – Stainless steel recommended.

²⁰IMPERMEABLE SURFACE.

²⁴In accordance with program.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-640, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030, 83-13-067 (Order 262), § 248-18-670, filed 6/16/83; Order 119, § 248-18-670, filed 5/23/75; Regulation 18.680, filed 1/25/62.]

- WAC 246-318-650 Radiology and other imaging facilities. Hospitals planning new construction of radiology and imaging facilities shall meet requirements under WAC 248-18-99902(18), WAC 248-28-032, and shall:
- (1) Follow general design requirements for architectural components, electrical service, lighting, call systems, hardware, interior finishes, heating, plumbing, sewerage, ventilation/air conditioning, and signage under WAC 248-18-719.
- (2) Meet general requirements for certain service facilities under WAC 248-18-711 and provide the following:
 - (a) Clean-up area;

- (b) Housekeeping room; and
- (c) Storage room or area.
- (3) Provide radiographic room with:
- (a) Location to minimize outpatient traffic through inpatient areas and convenient for the transport of patients from emergency department, surgery suite, and nursing units;
- (b) Barrier-free access for wheeled stretcher or bed movement;
- (c) Control area in accordance with WAC 402-28-032;
- (d) Installations for imaging equipment, cobalt-60, or other sources of ionizing radiation, and radiation protection of floors, doors, walls, and ceilings in accordance with WAC 248-18-99902(18) and WAC 402-28-032;
- (e) Grounding of table, tube stand and controls, and any associated electrical apparatus in accordance with WAC 248-18-99902(13);
- (f) Facilities and equipment to provide infection control as required under WAC 248-18-035 and 248-18-311; and
- (g) Lavatory in or immediately available to radiographic room or rooms.
 - (4) Provide contrast preparation area containing:
 - (a) A lavatory or sink with barium trap;
 - (b) Work counter; and
- (c) Enclosed storage cabinets or movable enclosed storage cabinets.
- (5) Provide processing or dark room or equivalent which is light-tight and has:
- (a) A safe light which means an electric light that does not fog films;
- (b) Developing tank with a thermostatic mixing valve, or automatic film processor with appropriate backflow protection;
 - (c) Film storage, shielded from stray radiation;
 - (d) Work counter;
 - (e) Sink, if dark room is provided; and
- (f) Lighting provided for clean-up and maintenance purposes.
- (6) Provide dressing area with rooms or booths providing privacy for dressing and including:
- (a) Provision for clean and soiled linen storage in or near dressing rooms; and
- (b) Access to at least one barrier-free booth or room to accommodate a wheelchair in or adjacent to the dressing area.
 - (7) Provide image viewing area with:
- (a) Film illuminator or equivalent, for viewing at least two films; and
 - (b) Location to prevent public view of films.
- (8) Provide waiting area with space for wheelchair patients, stretcher patients, and ambulatory patients.
- (9) Provide toilet connected to or adjacent to radiographic room or rooms, with ratio of one toilet for every two radiographic rooms.
 - (10) Provide administrative facilities with:
 - (a) Office area, with provision for consultation; and
 - (b) An active film file area.

- (11) Provide staff facilities separate or shared with other service areas meeting requirements under WAC 248-18-525(7).
- (12) Meet the following requirements if planning new construction of imaging rooms listed below:
- (a) Fluoroscopy room meeting requirements under subsection (3) of this section;
- (b) Angiography room with scrub sinks designed to meet requirements under WAC 248-18-251(5) and 248-18-645(9);
- (c) Cardiac laser, cardia catheterization with angioplasty or valvuloplasty with scrub sink and designed to meet requirements under WAC 248-18-251(5), 248-18-645(9), and 248-18-711 (2), (4), and (10);
- (d) Computerized tomography or computerized axial tomography (CT) room:
 - (i) With lavatory;
- (ii) Meeting manufacturer's specifications for installation and safety; and
- (iii) Meeting requirements under WAC 248-18-251(5) and 248-18-645(9).
- (e) Lithotripsy room meeting requirements under WAC 248-18-251(5), 248-18-711 (2), (4), and (10), and accessible to cystoscopy, if appropriate, meeting requirements of WAC 248-18-645(9);
- (f) Mammography room with provisions for patient privacy;
- (g) Magnetic resonance imaging (MRI) room meeting manufacturer's specifications for installation and safety;
- (h) Nuclear medicine room with a separate laboratory including a lavatory for preparation, storage, and safe disposal of radioactive materials meeting:
- (i) Manufacturer's specifications for installation and safety; and
 - (ii) Requirements under WAC 248-18-99902(27).
- (i) Other specialized rooms intended for invasive procedures meeting requirements under WAC 248-18-251(5) and 248-18-645(9).

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–650, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 89–22–109 (Order 008), § 248–18–656, filed 11/1/89, effective 12/2/89.]

- WAC 246-318-660 Radioisotope facilities. Optional. SHALL MEET REQUIREMENTS, IF INCLUDED. (REQUIREMENTS IN CAPITAL LETTERS SEE WAC 248-18-515.)
 - (1) RADIOISOTOPE FACILITIES, GENERAL.²¹
- (a) LOCATED SO OUTPATIENT TRAFFIC THROUGH INPATIENT AREAS WILL BE AVOIDED.
- (b) LOCATED TO MINIMIZE EXPOSURE HAZARD TO PATIENTS AND PERSONNEL.
 - (c) Located for ease of access by outpatients.
- (d) Located in or near clinical department assuming responsibility.
- (e) WORK SURFACES AND FLOORS SUBJECT TO SPILLS OF RADIOACTIVE SOLUTIONS TO BE IMPERMEABLE, READILY DECONTAMINATED SURFACES.

- (2) RADIOCHEMISTRY LABORATORY.
- (a) ADEQUATE RADIATION SHIELDING AND OTHER PROTECTIVE DEVICES TO FACILITATE SAFE STORAGE AND HANDLING OF ISOTOPES AND WASTE MATERIALS.⁶ ²¹
 - (b) EQUIPMENT:

SEPARATE WORK SURFACES FOR PATIENT DOSE AND FOR CLINICAL SPECIMEN PREPARATION.

FACILITIES FOR AIR CONTROL²² (glove box or fume hood).

LOCKABLE ISOTOPE STORAGE.6

EQUIPMENT AND SUPPLY STORAGE.6

LAVATORY OR SINK.

LOCKABLE STORAGE FOR CONTAMINATED EQUIPMENT AND WASTE MATERIALS.⁶

Storage unit⁶ for monitoring equipment located to avoid contamination.

- (3) PATIENT UP-TAKE MEASURING ROOM.
- (a) LOCATED AWAY FROM X-RAY MACHINES, AND RADIOACTIVE MATERIALS OR BE ADEQUATELY SHIELDED.
 - (b) DESK AND FILE SPACE.
- (c) WAITING AREA May be shared with other area if adjacent.
- (d) SPACE FOR DENTAL CHAIR OR EXAMINATION TABLE.
 - (e) EQUIPMENT:

Lavatory or sink.

WORK SURFACE FOR SCALER AND DETECTORS.

STORAGE CABINETS.6

Notes:

⁶May be movable equipment.

²¹Refer to WAC 248–18–99902(27).

²²May be omitted if program indicates is not needed.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-660, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.41 RCW. 90-12-014 (Order 061), § 248-18-665, filed 5/30/90, effective 6/30/90; Order 119, § 248-18-665, filed 5/23/75; Regulation 18.670, filed 1/25/62.]

- WAC 246-318-670 Electrocardiography facilities. Optional, SHALL MEET REQUIREMENTS, IF INCLUDED.
- (1) LOCATED OUTSIDE LABORATORY TEST-ING AREAS IN DESIGNATED ROOM OR AREA FREE FROM EXCESSIVE NOISE AND PROVIDING PRIVACY FOR PATIENTS.
- (2) MINIMUM DIMENSION OF EIGHT FEET AND MINIMUM AREA OF EIGHTY SQUARE FEET.
- (3) WHEN STRESS TEST FACILITY, MINI-MUM AREA ONE HUNDRED FIFTY SQUARE FEET AND VERTICAL HEIGHT NINE FEET.
 - (4) EQUIPMENT:
- (a) LAVATORY OR SINK IN OR CONVENIENT TO ROOM.
- (b) SPACE FOR ELECTROCARDIOGRAPHIC MACHINE.
 - (c) CLOTHES HOOK OR HOOKS.

- (d) LINEN STORAGE AND DISPOSAL FACILITIES OR SPACE IN OR CONVENIENT TO ROOM.⁶
 - (e) MEDICAL EMERGENCY SIGNAL DEVICE.
- (i) REGISTER BY DISTINCTIVE LIGHT AT CORRIDOR DOOR OR EQUIVALENT LOCATOR SYSTEM,
- (ii) REGISTER BY DISTINCTIVE VISUAL AND AUDIBLE SIGNALS AT LOCATIONS FROM WHICH ADDITIONAL ASSISTANCE IS ALWAYS AVAILABLE, AND
 - (iii) RESET ONLY AT POINT OF ORIGIN.
- (f) RECORD FILING FACILITY OR SPACE IN OR CONVENIENT TO ROOM OR ROOMS.⁶

FOOTNOTE: ⁶May be movable equipment.

[Statutory Authority: RCW 43.70.040. 91-02-049 (Order 121), recodified as § 246-318-670, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 87-03-030 (Order 2464), § 248-18-662, filed 1/14/87.]

WAC 246-318-680 Electroencephalography facilities. Optional, SHALL MEET REQUIREMENTS, IF INCLUDED.

- (1) LOCATED OUTSIDE OF LABORATORY TESTING AREAS IN DESIGNATED ROOM OR AREA FREE FROM EXCESSIVE NOISE AND PROVIDING PRIVACY FOR PATIENTS.
- (2) NOISE ATTENUATION MATERIALS IN WALLS AND CEILINGS.
- (3) MINIMUM DIMENSION OF EIGHT FEET AND MINIMUM AREA OF ONE HUNDRED SQUARE FEET.
 - (4) EQUIPMENT:
- (a) LAVATORY OR SINK IN ROOM OR NEARBY.
- (b) ADMINISTRATIVE OR CLERICAL AREA LOCATED IN SEPARATE ROOM FROM TESTING AREA.
 - (c) CLOTHES HOOK OR HOOKS.
- (d) LINEN STORAGE AND DISPOSAL FACILITIES OR SPACE IN OR CONVENIENT TO ROOM.⁶
- (e) MEDICAL EMERGENCY SIGNAL DEVICE TO:
- (i) REGISTER BY DISTINCTIVE LIGHT AT CORRIDOR DOOR OR EQUIVALENT LOCATOR SYSTEM,
- (ii) REGISTER BY DISTINCTIVE VISUAL AND AUDIBLE SIGNALS AT LOCATIONS FROM WHICH ADDITIONAL ASSISTANCE IS ALWAYS AVAILABLE, AND
 - (iii) RESET ONLY AT POINT OF ORIGIN.

FOOTNOTE: ⁶May be movable equipment.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–680, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.41.030. 87–03–030 (Order 2464), § 248–18–663, filed 1/14/87.]

WAC 246-318-690 Nursing unit--General. (RE-QUIREMENTS ARE SHOWN IN CAPITAL LET-TERS. SEE WAC 248-18-515.)

- (1) DEFINITION. A SEPARATE, PHYSICAL, AND FUNCTIONAL UNIT OF THE HOSPITAL WHICH INCLUDES A GROUP OF PATIENT ROOMS, AND THE ANCILLARY ADMINISTRATIVE AND SERVICE FACILITIES NECESSARY TO PROVIDE NURSING SERVICE TO THE OCCUPANTS OF THESE PATIENT ROOMS. EXCLUDES FACILITIES WHICH SERVE OTHER AREAS OF THE HOSPITAL AND WHICH CREATE TRAFFIC UNNECESSARY TO THE FUNCTIONS OF THE NURSING UNIT.
 - (2) LOCATION.
- (a) EACH NURSING UNIT LOCATED TO AVOID THROUGH TRAFFIC TO ANY SERVICE, DIAGNOSTIC, TREATMENT, OR ADMINISTRATIVE AREA. INTENSIVE CARE UNITS, AND PSYCHIATRIC NURSING UNITS IN A LOCATION WITH NO THROUGH TRAFFIC TO ANY OTHER AREA OF THE HOSPITAL. For nursery or neonatal intensive care unit, refer to WAC 248–18–224 and 248–18–637.
- (b) ALL ROOMS AND AREAS WITHIN A NURSING UNIT ON THE SAME FLOOR.
- (c) Nursing units placed on quiet side of site and separated from service and ambulance courts. Convenient relationships to surgery and obstetrical delivery suites, adjunct diagnostic and treatment facilities and service areas.
- (d) Location and relationship of nursing units in hospital to provide for flexible overlap of postpartum rooms with surgical rooms.
 - (3) CAPACITY.
- (a) Bed capacity of a nursing unit, twenty to thirty-five beds, except where necessary to provide separation of units, such as units for special care.²⁴
- (b) Additional service facilities may be required in units of more than thirty-five beds.²⁴
- (4) SEPARATION OF CLINICAL SERVICES.²⁴ Suitable combinations of ancillary administrative and service facilities between or among units may be permitted.²⁴
- (a) BEDS FOR POSTPARTUM PATIENTS GROUPED TOGETHER AND LOCATED TO AVOID INTERMIXING WITH BEDS FOR OTHER TYPES OF PATIENTS.
- (b) ROOMS WITH PEDIATRIC BEDS LOCATED TOGETHER OR IN CLOSE PROXIMITY TO EACH OTHER. 24 Refer to WAC 248-18-541.
- (c) WHEN A SEPARATE PSYCHIATRIC UNIT IS PLANNED, WAC 248–18–534 APPLIES. WHEN TEN OR MORE PSYCHIATRIC BEDS ARE PLANNED, A PSYCHIATRIC UNIT SHALL BE PROVIDED. Refer to WAC 248–18–534.
- (d) SEGREGATED INTENSIVE CARE PATIENT BEDS.²⁴ SEPARATE INTENSIVE CARE NURSING UNIT WHERE FIVE OR MORE BEDS ARE PLANNED. Refer to WAC 248–18–555.
- (e) SEPARATE NURSING HOME OR LONG-TERM CARE UNIT WHERE TEN OR MORE BEDS ARE PLANNED FOR NURSING HOME OR LONG-TERM CARE PATIENTS.

- (5) SPECIAL DESIGN FEATURES OF SPECIAL-IZED FACILITIES.
- (a) Facilities for psychiatric patients. Refer to WAC 248-18-530 (6)(c) and 248-18-534.
- (b) Facilities for pediatric patients. Refer to WAC 248-18-530 (6)(d) and 248-18-541.
- (c) Facilities for intensive care. Refer to WAC 248–18–555. Relites between corridors and rooms.
 - (6) PATIENT ROOM.
- (a) DIRECTLY ACCESSIBLE FROM CORRIDOR OF NURSING UNIT. LOCATED TO PREVENT TRAFFIC THROUGH ROOMS AND TO MINIMIZE ENTRANCE OF ODORS, NOISE, AND OTHER NUISANCES.
- (b) ISOLATION ROOM(S), ONE OR MORE PER HOSPITAL, FOR AIRBORNE COMMUNICABLE DISEASE WITH ADJOINING TOILET, BEDPAN FLUSHING EQUIPMENT, AND BATHING FACILITY. LAVATORY LOCATED IN ROOM AT ENTRY. AIR CHANGES AND AIR PRESSURE GRADIENTS AS DESCRIBED IN WAC 248–18–719 TABLE 719–3. ULTRAVIOLET GENERATOR IRRADIATION IN ROOMS DESIGNATED FOR ISOLATION OF TUBERCULOSIS PATIENTS AS DESCRIBED IN WAC 248–18–245 (1)(a)(iii). 6, 24 Mirror, shelf, and towel bar or hook not required if provided with lavatory in adjoining toilet room.
- (c) Rooms for disturbed medical or psychiatric patients. At least one seclusion or security room with adjoining toilet for the care of seriously disturbed patients on an appropriate nursing unit or near emergency rooms unless a separate psychiatric unit is provided, as described in WAC 248-18-534.
 - (d) CAPACITY AND AREA.
- (i) MAXIMUM CAPACITY OF FOUR BEDS PER PATIENT ROOM. Maximum patient room capacity of two beds recommended. At least twenty-five percent of beds in one-bed rooms.
- (ii) AT LEAST EIGHTY SQUARE FEET USABLE FLOOR SPACE PER BED IN MULTIBED ROOMS. One hundred square feet of usable floor space per bed in multibed rooms recommended.
- (iii) AT LEAST ONE HUNDRED SQUARE FEET USABLE FLOOR SPACE IN ONE-BED ROOMS. One hundred twenty-five square feet usable floor space in one-bed rooms recommended.
- (iv) AT LEAST FORTY SQUARE FEET PER BASSINET IN PATIENT ROOM FOR INFANT PEDIATRIC PATIENTS. ADULT REQUIREMENTS APPLY TO ROOMS FOR YOUTH CRIBS AND BEDS. Refer to WAC 248–18–541.
 - (e) DIMENSIONS.
- (i) MINIMUM WIDTH OF ELEVEN FEET FOR MULTIBED ROOMS. Minimum recommended dimensions of twelve feet by sixteen feet for two-bed rooms.
- (ii) MULTIBED ROOMS ARRANGED TO ALLOW SPACING OF BEDS AT LEAST TWO FEET FROM WALL (EXCEPT AT HEAD) AND AT LEAST THREE FEET APART. CLEARANCE AT LEAST THREE FEET EIGHT INCHES AT FOOT OF BED to permit passage of large equipment and beds.

- (f) EQUIPMENT.
- (i) LAVATORY IN EACH ROOM EXCEPT OPTIONAL IN PSYCHIATRIC PATIENT ROOMS OR SINGLE PATIENT ROOMS HAVING A SEPARATE ADJOINING TOILET ROOM WHICH SERVES SINGLE ROOM ONLY AND CONTAINS A LAVATORY.
- (ii) CUBICLE CURTAIN TRACKS OR RAILS TO PROVIDE COMPLETE SCREENING OF EACH BED OR AN EQUIVALENT MEANS FOR PROVIDING PRIVACY FOR EACH PATIENT IN ALL MULTIBED PATIENT ROOMS EXCEPT PSYCHIATRIC. Refer to WAC 248–18–534. TRACKS OR EQUIVALENT SCREENING SHALL PROVIDE ACCESS TO TOILET, LAVATORY, WARDROBE, AND ENTRY WITHOUT INTERFERENCE WITH PRIVACY OF OTHER PATIENTS.
- (iii) WARDROBE, CLOSET OR LOCKER PER BED FOR HANGING FULL LENGTH GARMENTS AND STORAGE OF PERSONAL EFFECTS, extra pillows, and other equipment.⁶
- (iv) SEPARATE OXYGEN OUTLET LOCATED AT HEAD OF EACH BED. (See exception for psychiatric unit WAC 248-18-534 (4)(c)). Alcoholism units may be excepted.
- (v) SEPARATE SUCTION OR VACUUM OUT-LET LOCATED AT HEAD OF EACH BED. (See exception for psychiatric unit WAC 248-18-534 (4)(c)). Alcoholism units may be excepted.
- (vi) NURSE CALL SYSTEM. Refer to WAC 248-18-719, Table 719-6.
- (g) DOORS AND WINDOWS. Refer to WAC 248-18-719(1), Table 719-1.
- (h) ELECTRICAL REQUIREMENTS. Refer to WAC 248-18-719(4), Table 719-5.
 - (7) PATIENT TOILET.
- (a) TOILET EQUIPPED WITH BEDPAN FLUSHING EQUIPMENT ADJOINING EACH PATIENT ROOM. Exceptions: Refer to WAC 248–18–534 PSYCHIATRIC NURSING UNIT, WAC 248–18–555 INTENSIVE CARE.
- (b) WATER CLOSETS IN RATIO OF AT LEAST ONE PER FOUR BEDS OR MAJOR FRACTION THEREOF ON EACH NURSING UNIT. For alteration projects, ratio of one per six acceptable.
- (c) AT LEAST ONE TOILET, DESIGNED AND ARRANGED FOR USE BY INDIVIDUALS IN WHEELCHAIRS, OPENING DIRECTLY FROM A MAIN CORRIDOR ON EACH FLOOR. For use by patients, public, and staff. May be used by either sex.
 - (8) PATIENT BATHING FACILITIES.
- (a) SHOWERS OR TUBS IN THE RATIO OF AT LEAST ONE BATHING FACILITY PER EIGHT BEDS OR MAJOR FRACTION THEREOF ON EACH NURSING UNIT.²⁴ BEDS HAVING A BATHING FACILITY ADJOINING THE PATIENT ROOM SHALL BE EXCLUDED FROM THE RATIO. For alteration projects, one bathing facility per twelve beds or major fraction thereof may be acceptable.

- (b) AT LEAST ONE COMMUNAL BATHING FACILITY ON EACH FLOOR TO BE AN "ISLAND" TUB (ACCESSIBLE ON TWO SIDES AND ONE END), OR ROLL-IN SHOWER OR EQUIVALENT, (shower in which a chair on wheels may be used). SPACE PROVIDED FOR WHEELCHAIR WITH ASSISTING ATTENDANT. Elevation of island tub on pedestal not recommended.
- (c) PROPERLY LOCATED GRAB BARS AT EACH BATHTUB, SHOWER, AND WATER CLOSET FOR PATIENT USE. Refer to WAC 248–18–719(6).
- (9) MISCELLANEOUS FACILITIES AND EOUIPMENT.
 - (a) NURSES' STATION OR EQUIVALENT.24
- (i) STATION FOR EACH NURSING UNIT OR SHARED WITH ADJACENT UNIT.²⁴
 - (ii) EQUIPMENT:²⁴

CHARTING SURFACE.6

STORAGE FOR PATIENT CHARTS.^{6, 24} TELEPHONE.

NURSE CALL ANNUNCIATOR.

Storage for charting supplies.

Clock

- (b) UTILITY OR MATERIALS ROOM.⁷ May be shared if adequate size and convenient to units served.²⁴
- (i) AT LEAST ONE CLEAN UTILITY ROOM OR A CLEAN MATERIALS ROOM ON EACH NURS-ING UNIT. Refer to WAC 248–18–711 (3) or (4).
- (ii) AT LEAST ONE SOILED UTILITY ROOM OR A SOILED MATERIALS ROOM ON EACH NURSING UNIT. Refer to WAC 248–18–711 (8) or
- (c) MEDICINE DISTRIBUTION FACILITIES.⁷ AT LEAST ONE ON EACH NURSING UNIT OR SHARED WITH ADJACENT UNIT(S).²⁴ Convenient to beds served.
- (d) LINEN STORAGE.¹⁸ IN CLEAN AREA ON EACH NURSING UNIT (SHELVING, CART, OR EQUIVALENT). OR SHARED WITH OTHER UNIT(S), if adequate size and convenient to units.
 - (e) ICE FACILITIES.
- (i) ON OR ADJACENT TO EACH NURSING UNIT. LOCATED IN AREA SERVING CLEAN FUNCTIONS ONLY, EXCEPT SELF-DISPENSING ICE MACHINES may be in alcove on corridor.
- (ii) EQUIPMENT: May be combined with nourishment facilities.

WORK COUNTER.6

ICE MACHINE OR ADEQUATE STORAGE UNIT.

(Self-dispensing types recommended.)

- (f) DRINKING FACILITIES ACCESSIBLE IN PUBLIC AREA ON EACH FLOOR TO PROVIDE WATER: (Fountain, disposable drinking cups or equivalent dispensing system accessible to individuals using wheelchairs).
 - (g) NOURISHMENT FACILITIES.
- (i) ON OR ADJACENT TO EACH NURSING UNIT. SEPARATE AREA IN ROOM SERVING CLEAN FUNCTIONS ONLY; SEPARATE ROOM

IF FACILITIES TO BE USED FOR DISHWASHING OR DECENTRALIZED FOOD SERVICE.

- (ii) SPACE FOR WASTE CONTAINER.
- (iii) EQUIPMENT:

REFRIGERATOR.6

WORK COUNTER.6

SINK OR LAVATORY.

STORAGE FOR UTENSILS AND FOODSTUFFS.⁶

Cooking unit.6

DISHWASHING MACHINE (OR THREE-COMPARTMENT SINK) IF DISHES, GLASSES OR PITCHERS ARE TO BE WASHED ON THE UNIT.

- (iv) ADDITIONAL FACILITIES MAY BE RE-QUIRED DEPENDING UPON DEGREE OF DE-CENTRALIZATION OF FOOD SERVICE. Refer to chapter 248–84 WAC.
- (h) EQUIPMENT STORAGE. 18 ON OR ADJACENT TO EACH NURSING UNIT. FOR NURSING AND MEDICAL EQUIPMENT. Centralized equipment storage area may be acceptable. 24
- (i) WHEELCHAIR AND STRETCHER STORAGE ON OR ADJACENT TO EACH NURSING UNIT.¹⁸
- (j) HOUSEKEEPING FACILITIES.⁵ ON OR ADJACENT TO EACH NURSING UNIT.
 - (k) PERSONNEL FACILITIES.
- (i) TOILET ON OR ADJACENT TO EACH NURSING UNIT.
- (ii) STORAGE FOR PURSES AND PERSONAL EFFECTS APART FROM STORAGE FOR PATIENT CARE SUPPLIES AND EQUIPMENT ON OR ADJACENT TO EACH NURSING UNIT.
- (l) Treatment and examination room.²⁴ REQUIRED FOR HOSPITALS WITH PSYCHIATRIC AND PEDIATRIC UNITS. Refer to WAC 248–18–534 (8)(e), 248–18–541.
- (i) MINIMUM DIMENSION, EIGHT FEET, AT LEAST EIGHTY SQUARE FEET EXCLUSIVE OF CABINETS, SINK, WORK COUNTER, DESK AND VESTIBULE.
 - (ii) EQUIPMENT:

EMERGENCY SIGNAL DEVICE.

LAVATORY OR SINK.

Clock.

Oxygen outlet.

Suction outlet.

WORK SURFACE.6

STORAGE CABINET.6

- (m) Patient activity areas.²⁴ Optional except where mandated in this section.
- (i) Adequate facilities to accommodate the maximum number of patients to be cared for.
- (ii) PLAYROOM OR AREA FOR PEDIATRIC PATIENTS. Refer to WAC 248-18-541.
- (iii) DAYROOM WITH WINDOWS OR SOLAR-IUM ON PSYCHIATRIC NURSING UNITS AND NURSING HOME OR LONG-TERM CARE UNITS. Refer to WAC 248-18-534.

- (iv) RECREATION ROOM ON PSYCHIATRIC NURSING UNITS AND NURSING HOME OR LONG-TERM CARE UNITS.²⁴ Refer to WAC 248–18–534.
- (v) DINING AREA ON OR AVAILABLE TO PSYCHIATRIC NURSING UNITS AND NURSING HOME OR LONG-TERM CARE UNITS.²⁴ Refer to WAC 248-18-534.
- (vi) OCCUPATIONAL THERAPY AREA ON OR AVAILABLE TO PSYCHIATRIC NURSING UNITS AND NURSING HOME OR LONG-TERM CARE UNITS.²⁴ Refer to WAC 248–18–534.
 - (vii) Above areas may be combined in one room.²⁴
- (viii) Suitable outdoor recreational space for patients on nursing home or long-term care units and psychiatric units. Refer to WAC 248-18-534.
- (ix) Barber and beauty shop facilities available for psychiatric and nursing home or long-term care units. Refer to WAC 248-18-534.
 - (n) Patient laundry facilities.24
- (i) REQUIRED ON PSYCHIATRIC UNITS. Refer to WAC 248-18-534. Recommended on nursing home or long-term care units.²⁴
 - (ii) EQUIPMENT:

SINK AND COUNTER.6

Drying facilities.6, 24

STORAGE CABINET.6

Ironing facilities.6, 24

- (o) Interview room. REQUIRED ON OR ACCESSIBLE TO PSYCHIATRIC UNITS. Refer to WAC 248-18-534. Recommended on nursing home or long-term care units. May be combined with private office.
- (p) Patient classroom. Recommended availability for obstetric, psychiatric, and pediatric units and other units where group instruction to patients may be given. Refer to WAC 248-18-541.
- (q) OFFICE FOR HEAD NURSE OR NURSING SUPERVISOR ON OR CONVENIENT TO UNITS OF TWENTY BEDS OR MORE.²⁴ AT LEAST ONE NURSING OFFICE PER HOSPITAL.
- (r) CONFERENCE ROOM FOR CONFIDENTIAL STAFF COMMUNICATION.²⁴ Combined with rooms for other nursing functions as appropriate.
- (s) AT LEAST ONE WAITING ROOM OR AREA PER FLOOR.²⁴

Notes:

⁵See GENERAL REQUIREMENTS FOR SERVICE FACILITIES, WAC 248–18–711(6), HOUSEKEEPING FACILITIES.

May be movable equipment.

⁷See GENERAL REQUIREMENTS FOR SERVICE FACILITIES, WAC 248–18–711.

¹⁸See GENERAL REQUIREMENTS FOR SERVICE FACILITIES, WAC 248–18–711(10), STORAGE FACILITIES.

²⁴In accordance with program.

[Statutory Authority: RCW 43.70.040. 91–02–049 (Order 121), recodified as § 246–318–690, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 70.41 RCW. 90–12–014 (Order 061), § 248–18–530, filed 5/30/90, effective 6/30/90. Statutory Authority: RCW 43.20.050 and chapter 70.41 RCW. 81–22–014 (Order 216), § 248–18–530, filed 10/23/81; Order 119, § 248–18–530, filed 5/23/75; Regulation 18.560, §§ 1, 2 and 3, filed 1/25/62.]